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September 8, 2005  
54.25847.0050

Ms. Darcy Bering  
Sonoma County Environmental Health Division  
475 Aviation Boulevard, Suite 220  
Santa Rosa, California 95403

Subject: Monitoring Report First Quarter 2005, Former Food and Liquor #50, 766 East Cotati Avenue, Cotati, California, File No. 00001522

Dear Ms. Bering:

This report presents the results of quarterly groundwater monitoring and sampling performed on February 17 and 18, 2005, by ATC Associates Inc. (ATC) on behalf of The Customer Company at the site located at 766 East Cotati Avenue, Cotati, California (Figure 1). Sampling was performed to monitor the distribution of petroleum hydrocarbons in groundwater at the site. Monitoring was performed to evaluate the groundwater flow direction and the hydraulic gradient in shallow groundwater.

## SITE HISTORY

In February 1988, two 10,000-gallon capacity gasoline underground storage tanks (USTs) were excavated and removed from the site. In addition, approximately 1,300 cubic yards of soil was excavated and disposed of at an off-site landfill. Evidence of a petroleum hydrocarbon release was detected at this time.

In March 1988, J.H. Kleinfelder and Associates conducted an assessment and installed three groundwater monitoring wells MW1 through MW3 to depths of approximately 27, 32, and 30 feet below ground surface (bgs), respectively, in the vicinity of the former USTs.

In March 1989, Dames & Moore (DM) conducted a Preliminary Site Characterization which included installing four groundwater monitoring wells (DM1 through DM4). Petroleum hydrocarbons were detected in the soil and groundwater samples collected and the results are contained in DM's *Preliminary Report Groundwater Contamination Study, Food & Liquor No. 50, 766 East Cotati Avenue, Cotati, California*, dated May 10, 1989.

In January 1991, DM installed two groundwater monitoring wells (DM5 and DM6) to a depth of approximately 45 feet bgs. In January 1993, DM installed two groundwater monitoring wells (DM7 and DM8) to depths of approximately 40 and 35 feet bgs, respectively.

In 2002, Gettler-Ryan Inc. attempted to locate well DM8 which was presumed to be paved over in 1994 during station remodeling and expansion. All attempts to locate DM8 were unsuccessful. It was concluded that well DM8 was lost and buried. A summary of the well search is contained in Gettler-Ryan's report titled, *Evaluation of Potential Risk, Lost Well DM-8, Food & Liquor Service Station #50, 766 East Cotati Avenue, Cotati, California*, dated April 23, 2003.

## SAMPLING ACTIVITIES

On February 17 and 18, 2005, ATC personnel collected groundwater samples from monitoring wells MW1, MW2, MW3, DM1, DM2, DM3, DM4, DM5, DM6, DM7, and domestic well DW2. The locations of the wells are shown on Figure 2. Prior to collection of groundwater samples, the depth to water was measured in the wells and pH, electrical conductivity, and temperature were measured. Turbidity was visually observed in groundwater purged from the monitoring wells and recorded. Approximately three well casing volumes were purged from each monitoring well prior to sampling. The wells were allowed to recover and samples were collected from each well using disposable polyethylene bailers.

The groundwater samples collected from each well were submitted to State-certified Excelchem Environmental Laboratories (Environmental Laboratory Accreditation Program Cert. No. 2119) in Roseville, California for chemical analyses of total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tert butyl ether (MTBE), ethyl tertiary butyl ether (ETBE) di-isopropyl ether (DIPE), tertiary amyl ether (TAME), tertiary butyl ether (TBA), 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (EDB) utilizing EPA Method 8260B. Groundwater well purge and sample logs are included in Attachment 1.

## GROUNDWATER FLOW DIRECTION

Water levels measured from MW1 through MW3 and DM1 through DM7 on February 17, 2005, ranged from 6.36 to 7.84 feet below the tops of the well casing, representing an average increase in the shallow water table elevation of approximately 3.95 feet since December 2004.

The groundwater levels are above the screened intervals in MW1, MW2, MW3, DM1, DM2, DM3, DM4, DM5, DM6, and DM7. The screened intervals of the wells are presented in column 1 of Table 1. The water level data were used to develop the groundwater elevation contour map (Figure 3). Shallow groundwater beneath the site apparently flows toward the north-northwest. The average hydraulic gradient on February 17, 2005 was calculated to be 0.007 ft/ft or approximately 37 ft/mile.

Depth to water in the off-site domestic well, DW2 was 10.29 feet below the top of well casing representing an increase of approximately 8.27 feet since December 2004. A summary of groundwater monitoring data is presented in Table 1.

## **ANALYTICAL RESULTS**

Though the groundwater levels in monitoring wells MW1, MW2, MW3, DM1, DM2, DM3, DM4, DM5, DM6, and DM7 were above the screened intervals, analytical results for the dissolved phase hydrocarbon constituents is used as representative for each of the wells. TPHg was detected in the groundwater sample collected from MW1 at a concentration of 200 micrograms per liter ( $\mu\text{g/L}$ ). BTEX constituents were not detected in any of the groundwater samples collected from wells MW1 through MW3, DM1 through DM7, and DW2.

MTBE was detected in the groundwater samples collected from MW1, DM3, and DM5, at concentrations of 9.8  $\mu\text{g/L}$ , 5.3  $\mu\text{g/L}$ , and 6.6  $\mu\text{g/L}$ , respectively. ETBE, DIPE, TAME, 1,2-DCA, and EDB were not detected at or above the laboratory reported detection limits in any of the groundwater samples collected from MW1 through MW3, DM1 through DM7, or DW2.

Analytical results of groundwater samples are summarized in Table 2. Laboratory data sheets and chain-of-custody documentation are contained in Attachment 2. An isoconcentration map depicting the MTBE concentrations in samples collected from the on-site wells during the first quarter 2005 is shown on Figure 4.

## **GEOTRACKER DATA UPLOAD**

The depth to water data was submitted electronically to the State Water Resources Control Board (SWRCB) Geotracker database (confirmation number 7218464493) and the laboratory data were also submitted electronically to the SWRCB Geotracker database (confirmation number 5492114305). The facility has been assigned a Geotracker global identification number T0609700126. Documentation of the data submittal is contained in Attachment 3.

## **CONCLUSIONS**

The laboratory analytical results of the groundwater samples collected on February 17 and 18, 2005, are generally consistent with recent historical results. Concentrations of MTBE increased slightly in the samples collected from MW1 and DM5 and decreased to nondetectable levels in the sample collected from DM7 since the previous monitoring event. With the exception of the November 2003 sampling event, chemicals of concern have not been detected in samples collected from MW2, DM1, and DM2 since May 2002. Chemicals of concern have not been detected in any of the samples collected from wells DM4 and DM6 since March 2002, and DW2 since September 2002. The direction of groundwater flow beneath the site flowed toward the north. The average groundwater elevation at the site increased approximately 3.95 feet since December 2004.

The groundwater levels in monitoring wells MW1, MW2, MW3, DM1, DM2, DM3, DM4, DM5, DM6, and DM7 were above the screened intervals during the February 2005 groundwater monitoring event. Although the screened intervals are below the water table, ATC believes the analytical results for the dissolved phase hydrocarbon constituents are representative for each of the wells.

## RECOMMENDATIONS

Based on the results of the first quarter 2005 monitoring event and historical information, we recommend the following:

- Continue quarterly groundwater monitoring and sampling of MW1, MW3, DM3, and DM5 and semi-annual groundwater sampling of wells MW2, DM1, DM2, DM4, DM6, DM7, and domestic well DW2. If concentrations are consistent or decrease during the second quarter 2005 monitoring event, ATC recommends no further action at the site.
- Submit a letter report with a trend analysis for wells currently impacted with TPHg and MTBE above the stated action levels.

Please contact our office at (209) 579-2221 if you have any questions or comments.

Respectfully submitted,  
ATC Associates Inc.

*Nathan Christman*

Nathan Christman  
Staff Geologist

*J. M. Sawyer*

Lorraine M. Sawyer  
CA Professional Geologist #4450



cc: Mr. John Johnson, The Customer Company  
Mr. Luis Rivera, NCRWQCB  
Mr. Geno Macedo, Geno's General Store

**TABLE 1**  
**SUMMARY OF GROUNDWATER MONITORING DATA**  
**Former Food and Liquor #50**  
**766 East Cotati Avenue, Cotati, California**  
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Well ID (screen interval)	Date Measured	(Reported in feet)			Groundwater Flow Direction	Groundwater Magnitude (ft/ft)
		TOC Elevation	Depth to Water	Groundwater Elevation		
<b>MW1</b>  (10-25)	04/21/88	NM	NM	NM	—	—
	04/27/88	109.54	19.84	89.70	—	—
	06/14/89	109.54	19.86	89.68	—	—
	07/28/89	109.54	21.02	88.52	—	—
	08/29/89	109.54	20.15	89.39	—	—
	10/04/89	109.54	20.97	88.57	—	—
	11/21/89	109.54	21.45	88.09	—	—
	12/28/89	109.54	DRY	NM	—	—
	02/07/90	109.54	DRY	NM	—	—
	03/19/90	109.54	22.10	87.44	—	—
	04/20/90	109.54	DRY	NM	—	—
	06/05/00	109.54	--- INACCESSIBLE - COULD NOT OPEN WELL ---			—
	11/01/00	109.54	--- INACCESSIBLE - COULD NOT OPEN WELL ---			—
	03/14/02	111.82	7.64	104.18	—	—
	05/30/02	111.82	10.38	101.44	—	—
	08/15/02	111.82	12.69	99.13	—	—
	11/21/02	111.82	16.38	95.44	—	—
	02/28/03	111.82	8.93	102.89	—	—
	05/30/03	111.82	9.78	102.04	—	—
	08/29/03	111.82	12.65	99.17	—	—
	11/24/03	111.82	14.85	96.97	—	—
	02/17/04	111.82	6.00	105.82	varies	—
	05/20/04	111.82	8.70	103.12	west-southwest	0.01
	08/26/04	110.20	11.00	99.20	south	0.021
	12/02/04	110.20	10.48	99.72	south	0.015
	02/17/05	110.20	6.71	103.49	north-northwest	0.007
<b>MW2</b>  (13-30)	04/21/88	NM	NM	NM	—	—
	04/27/88	109.30	19.50	89.80	—	—
	06/14/89	109.30	17.93	91.37	—	—
	07/28/89	109.30	19.53	89.77	—	—
	08/29/89	109.30	19.56	89.74	—	—
	10/04/89	109.30	22.40	86.90	—	—
	11/21/89	109.30	DRY	NM	—	—
	12/28/89	109.30	DRY	NM	—	—
	02/07/90	109.30	21.91	87.39	—	—
	03/19/90	109.30	21.68	87.62	—	—
	04/20/90	109.30	22.20	87.10	—	—
	06/05/00	109.30	--- INACCESSIBLE - COULD NOT OPEN WELL ---			—
	11/01/00	109.30	--- INACCESSIBLE - COULD NOT OPEN WELL ---			—
	03/14/02	111.50	7.71	103.79	—	—
	05/30/02	111.50	9.20	102.30	—	—
	08/15/02	111.50	10.86	100.64	—	—
	11/21/02	111.50	14.29	97.21	—	—
	02/28/03	111.50	8.24	103.26	—	—

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Well ID (screen interval)	Date Measured	(Reported in feet)			Groundwater Flow Direction	Groundwater Magnitude (ft/ft)
		TOC Elevation	Depth to Water	Groundwater Elevation		
<b>MW2</b>  (13-30)	05/30/03	111.50	8.86	102.64	varies west-southwest	— — — — 0.01 0.021 0.015 0.007
	08/29/03	111.50	10.74	100.76		
	11/24/03	111.50	12.76	98.74		
	02/17/04	111.50	5.95	105.55		
	05/20/04	111.50	9.12	102.38		
	08/26/04	109.72	10.05	99.67		
	12/02/04	109.72	9.72	100.00		
	02/17/05	109.72	6.60	103.12		
<b>MW3</b>  (15-28)	04/21/88	NM	NM	NM	— — — — — — — — — — — — — — — — — — — —	— — — — — — — — — — — — — — — — — — — —
	04/27/88	109.91	20.41	89.50		
	06/14/89	109.91	20.35	89.56		
	07/28/89	109.91	23.00	86.91		
	08/29/89	109.91	23.28	86.63		
	10/04/89	109.91	25.44	84.47		
	11/21/89	109.91	26.79	83.12		
	12/28/89	109.91	DRY	NM		
	02/07/90	109.91	24.62	85.29		
	03/19/90	109.91	23.28	86.63		
	04/20/90	109.91	NM	NM		
	10/16/99	109.91	15.16	94.75		
	01/28/00	109.91	28.31	81.60		
	06/05/00	109.91	14.76	95.15		
	11/01/00	109.91	16.30	93.61		
	03/14/02	112.20	— INACCESSIBLE - COULD NOT OPEN WELL —			
	05/30/02	112.20	10.18	102.02	varies west-southwest	— — — — — — — — — —
	08/15/02	112.20	12.43	99.77		
	11/21/02	112.20	16.08	96.12		
	02/28/03	112.20	8.75	103.45		
	05/30/03	112.20	9.58	102.62		
	08/29/03	112.20	12.31	99.89		
	11/24/03	112.20	14.58	97.62		
	02/14/04	112.20	6.18	106.02		
	05/20/04	112.20	8.56	103.64		
	08/26/04	111.35	11.82	99.53		
	12/02/04	111.35	11.32	100.03	— — — — —	0.01 0.021 0.015 0.007
	02/17/05	111.35	7.61	103.74		
<b>DM1</b>  (15-40)	04/19/89 <sup>1</sup>	109.57	16.83	92.74		
	06/14/89	109.57	18.58	90.99		
	07/28/89	109.57	19.92	89.65		
	08/29/89	109.57	19.05	90.52		
	10/04/89	109.57	22.74	86.83		
	11/21/89	109.57	24.99	84.58		
	12/28/89	109.57	26.53	83.04		
	02/07/90	109.57	22.31	87.26		
	03/19/90	109.57	21.15	88.42		
	04/20/90	109.57	22.71	86.86		
	12/02/90	109.57	28.56	81.01		

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Well ID (screen interval)	Date Measured	(Reported in feet)			Groundwater Flow Direction	Groundwater Magnitude (ft/ft)
		TOC Elevation	Depth to Water	Groundwater Elevation		
DM1 (15-40)	01/28/91	109.53	30.28	79.25	—	—
	02/11/91	109.53	29.61	79.92		
	03/25/91	109.53	17.83	91.70		
	05/02/91	109.53	19.66	89.87		
	06/04/91	109.53	21.63	87.90		
	07/16/91	109.53	21.23	88.30		
	07/29/91	109.53	21.61	87.92		
	11/11/92	109.53	24.66	84.87		
	01/27/93	109.53	8.38	101.15		
	10/16/99	109.53	13.51	96.02		
	01/28/00	109.53	24.83	84.70		
	06/05/00	109.53	13.11	96.42		
	11/01/00	109.53	14.60	94.93		
	03/14/02	112.33	7.77	104.56		
	05/30/02	112.33	10.08	102.25		
	08/15/02	112.33	11.92	100.41		
	11/21/02	112.33	15.42	96.91		
	02/28/03	112.33	8.95	103.38		
	05/30/03	112.33	9.65	102.68		
	08/29/03	112.33	11.81	100.52		
	11/24/03	112.33	13.98	98.35		
	02/17/04	112.33	6.50	105.83	varies west-southwest	— 0.01
	05/20/04	112.33	8.82	103.51		
	08/26/04	110.60	10.89	99.71		
	12/02/04	110.60	10.47	100.13		
	02/17/05	110.60	7.21	103.39		
DM2 (15-40)	04/19/89 <sup>1</sup>	110.55	19.10	91.45	—	—
	06/14/89	110.55	20.99	89.56		
	07/28/89	110.55	23.11	87.44		
	08/29/89	110.55	23.46	87.09		
	10/04/89	110.55	25.55	85.00		
	11/21/89	110.55	27.61	82.94		
	12/28/89	110.55	29.25	81.30		
	02/07/90	110.55	25.37	85.18		
	03/19/90	110.55	23.66	86.89		
	04/20/90	110.55	25.25	85.30		
	12/02/90	110.55	31.61	78.94		
	01/28/91	110.50	33.57	76.93		
	02/11/91	110.50	33.27	77.23		
	03/25/91	110.50	22.64	87.86		
	05/02/91	110.50	22.26	88.24		
	06/04/91	110.50	24.29	86.21		
	07/16/91	110.50	24.77	85.73		
	07/29/92	110.50	24.12	86.38		
	11/11/92	110.50	27.20	83.30		
	01/27/93	110.50	9.99	100.51		

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Well ID (screen interval)	Date Measured	(Reported in feet)			Groundwater Flow Direction	Groundwater Magnitude (ft/ft)
		TOC Elevation	Depth to Water	Groundwater Elevation		
<b>DM2</b>  (15-40)	06/05/00	110.50	--UNABLE TO LOCATE		--	--
	11/01/00	110.50	--UNABLE TO LOCATE		--	--
	03/14/02	113.25	8.61	104.64	--	--
	05/30/02	113.25	11.28	101.97	--	--
	08/15/02	113.25	13.54	99.71	--	--
	11/21/02	113.25	17.19	96.06	--	--
	02/28/03	113.25	9.81	103.44	--	--
	05/30/03	113.25	10.65	102.60	--	--
	08/29/03	113.25	13.38	99.87	--	--
	11/24/03	113.25	15.67	97.58	--	--
	02/17/04	113.25	7.21	106.04	varies	--
	05/20/04	113.25	9.60	103.65	west-southwest	0.01
	08/26/04	111.54	12.09	99.45	south	0.021
	12/02/04	111.54	11.54	100.00	south	0.015
<b>DM3</b>  (15-40)	02/17/05	111.54	7.84	103.70	north-northwest	0.007
	04/19/89 <sup>1</sup>	109.45	19.25	90.20	--	--
	06/14/89	109.45	20.66	88.79	--	--
	07/28/89	109.45	23.08	86.37	--	--
	08/29/89	109.45	22.70	86.75	--	--
	10/04/89	109.45	24.75	84.70	--	--
	11/21/89	109.45	27.06	82.39	--	--
	12/28/89	109.45	29.05	80.40	--	--
	02/07/90	109.45	25.76	83.69	--	--
	03/19/90	109.45	24.13	85.32	--	--
	04/20/90	109.45	25.31	84.14	--	--
	12/02/90	109.45	31.46	77.99	--	--
	01/28/91	109.41	33.17	76.24	--	--
	02/11/91	109.41	33.46	75.95	--	--
	03/25/91	109.41	22.37	87.04	--	--
	05/02/91	109.41	22.88	86.53	--	--
	06/04/91	109.41	24.00	85.41	--	--
	07/16/91	109.41	23.39	86.02	--	--
	07/29/92	109.41	23.82	85.59	--	--
	11/11/92	109.41	27.12	82.29	--	--
	01/27/93	109.41	10.10	99.31	--	--
	10/16/99	109.41	15.32	94.09	--	--
	01/28/00	109.41	25.81	83.60	--	--
	06/05/00	109.41	15.01	94.40	--	--
	11/01/00	109.41	16.74	92.67	--	--
	03/14/02	112.33	8.24	104.09	--	--
	05/30/02	112.33	11.20	101.13	--	--
	08/15/02	112.33	13.91	98.42	--	--
	11/21/02	112.33	17.62	94.71	--	--
	02/28/03	112.33	9.54	102.79	--	--
	05/30/03	112.33	10.61	101.72	--	--
	08/29/03	112.33	13.86	98.47	--	--

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Well ID (screen interval)	Date Measured	(Reported in feet)			Groundwater Flow Direction	Groundwater Magnitude (ft/ft)
		TOC Elevation	Depth to Water	Groundwater Elevation		
DM5 (20-45)	07/29/92 <sup>2</sup>	110.29	25.05	85.24	—	—
	11/11/92 <sup>2</sup>	110.29	27.45	82.84	—	—
	01/27/93 <sup>2</sup>	110.29	10.86	99.43	—	—
	10/16/99	110.29	15.69	94.60	—	—
	01/28/00	110.29	30.42	79.87	—	—
	06/05/00	110.29	15.58	94.71	—	—
	11/01/00	110.29	17.08	93.21	—	—
	03/14/02	112.76	8.54	104.22	—	—
	05/30/02	112.76	11.53	101.23	—	—
	08/15/02	112.76	14.23	98.53	—	—
	11/21/02	112.76	17.91	94.85	—	—
	02/28/03	112.76	9.78	102.98	—	—
	05/30/03	112.76	10.79	101.97	—	—
	08/29/03	112.76	14.19	98.57	—	—
	11/24/03	112.76	16.41	96.35	—	—
	02/17/04	112.76	6.90	105.86	varies	—
	05/20/04	112.76	9.41	103.35	west-southwest	0.01
	08/26/04	111.04	12.15	98.89	south	0.021
	12/02/04	111.04	11.54	99.50	south	0.015
	02/17/05	111.04	7.39	103.65	north-northwest	0.007
DM6 (20-45)	02/11/91 <sup>1</sup>	109.36	33.45	75.91	—	—
	03/25/91	109.36	24.32	85.04	—	—
	05/02/91	109.36	23.88	85.48	—	—
	06/04/91	109.36	24.97	84.39	—	—
	07/16/91	109.36	25.80	83.56	—	—
	07/29/92	109.36	25.20	84.16	—	—
	11/11/92	109.36	27.30	82.06	—	—
	01/27/93	109.36	10.90	98.46	—	—
	10/16/99	109.36	16.12	93.24	—	—
	01/28/00	109.36	31.13	78.23	—	—
	06/05/00	109.36	15.72	93.64	—	—
	11/01/00	109.36	18.00	91.36	—	—
	03/14/02	111.82	8.13	103.69	—	—
	05/30/02	111.82	11.68	100.14	—	—
	08/15/02	111.82	15.01	96.81	—	—
	11/21/02	111.82	19.12	92.70	—	—
	02/28/03	111.82	9.97	101.85	—	—
	05/30/03	111.82	10.43	101.39	—	—
	08/29/03	111.82	14.88	96.94	—	—
	11/24/03	111.82	17.60	94.22	—	—
	02/17/04	111.82	6.25	105.57	varies	—
	05/20/04	111.82	8.76	103.06	west-southwest	0.01
	08/26/04	110.10	12.08	98.02	south	0.021
	12/02/04	110.10	11.36	98.74	south	0.015
	02/17/05	110.10	6.36	103.74	north-northwest	0.007
DM7 (10-33)	01/27/93	109.71	11.07	98.64	—	—
	10/16/99	109.71	15.79	93.92	—	—
	01/28/00	109.71	21.93	87.78	—	—

**TABLE 1**  
**SUMMARY OF GROUNDWATER MONITORING DATA**  
**Former Food and Liquor #50**  
**766 East Cotati Avenue, Cotati, California**  
**Page 7 of 8**

Well ID (screen interval)	Date Measured	(Reported in feet)			Groundwater Flow Direction	Groundwater Magnitude (ft/ft)
		TOC Elevation	Depth to Water	Groundwater Elevation		
DM7 (10-33)	06/05/00	109.71	15.25	94.46	—	—
	11/01/00	109.71	17.32	92.39	—	—
	03/14/02	112.03	8.17	103.86	—	—
	05/30/02	112.03	11.44	100.59	—	—
	08/15/02	112.03	14.35	97.68	—	—
	11/21/02	112.03	18.22	93.81	—	—
	02/28/03	112.03	8.92	103.11	—	—
	05/30/03	112.03	9.51	102.52	—	—
	08/29/03	112.03	14.17	97.86	—	—
	11/24/03	112.03	16.70	95.33	—	—
	02/17/04	112.03	5.35	106.68	varies	—
	05/20/04	112.03	9.00	103.03	west-southwest	0.01
	08/26/04	110.30	11.91	98.39	south	0.021
	12/02/04	110.30	11.24	99.06	south	0.015
DM8 (10-33)	02/17/05	110.30	6.76	103.54	north-northwest	0.007
	01/27/93	108.74	7.63	101.11	—	—
	06/05/00	108.74	— UNABLE TO LOCATE —		—	—
RPMUNI4 (NA)	11/01/00	108.74	— UNABLE TO LOCATE —		—	—
	03/14/02	112.05	NM	NM	—	—
	05/30/02	112.05	NM	NM	—	—
	08/15/02	112.05	NM	NM	—	—
	11/21/02	112.05	NM	NM	—	—
	02/28/03	112.05	—SAMPLED ANNUALLY—		—	—
	05/30/03	112.05	NM	NM	—	—
	08/29/03	112.05	—SAMPLED ANNUALLY—		—	—
	11/24/03	112.05	NM	NM	—	—
	02/17/05	112.05	NM	NM	—	—

**TABLE 1**  
**SUMMARY OF GROUNDWATER MONITORING DATA**  
**Former Food and Liquor #50**  
**766 East Cotati Avenue, Cotati, California**  
**Page 8 of 8**

Well ID (screen interval)	Date Measured	(Reported in feet)			Groundwater Flow Direction	Groundwater Magnitude (ft/ft)
		TOC Elevation	Depth to Water	Groundwater Elevation		
<b>DW2</b> <i>Domestic Well (NA)</i>	09/26/02	NM	NM	NM	--	--
	11/21/02	NM	37.41	NM	--	--
	02/28/03	NM	23.78	NM	--	--
	05/30/03	NM	25.06	NM	--	--
	08/29/03	NM	29.46	NM	--	--
	11/24/03	NM	33.93	NM	--	--
	02/17/04	NM	15.20	NM	--	--
	05/20/04	NM	14.86	NM	--	--
	08/26/04	NM	22.56	NM	--	--
	12/02/04	NM	18.56	NM	--	--
	02/17/05	NM	10.29	NM	--	--

**Notes:**

TOC denotes Top of Casing

NM denotes that this parameter was not monitored or depth to water was not measured

-- Not applicable

Data prior to March 14, 2002 was provided by The Customer Company

- TOC elevations were resurveyed on April 25, 2003 by Horizon Land Surveys. TOC elevations are referenced to National Geodetic Survey benchmark #RV 185 NWP RR (Benchmark Elevation = 108.30 feet, NGVD 88). TOC elevations have been surveyed in feet relative to mean sea level (msl).

<sup>1</sup> Well Installation

<sup>2</sup> Nitrates in Groundwater (DM5) were measured on 01/31/91 as 20ppm; 09/03/91 as 11ppm; 07/29/92 as 4.1 ppm; 11/11/92 as 0.74 ppm and 01/27/93 as 3.1 ppm.

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Food and Liquor #50, 766 East Cotati Avenue, Cotati, California**  
**Page 1 of 8**

Sample ID	Date	(Reported in ug/l)											
		TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
MW1	04/21/88	120	16,000	15,000	4,100	19,000	NA	NA	NA	NA	NA	NA	NA
	04/27/88	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	06/14/89	35,000	2,000	3,700	NA	11,200	NA	NA	NA	NA	NA	NA	NA
	07/28/89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/29/89	220	100	15.6	NA	40.1	NA	NA	NA	NA	NA	NA	NA
	10/04/89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/21/89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/28/89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/07/90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/90	270	2.7	7.2	NA	37.2	NA	NA	NA	NA	NA	NA	NA
	04/20/90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	06/05/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/01/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/14/02	<50	<0.50	<0.50	<0.50	<0.50	1.3	<5.0	<.50	<.50	<.50	<.50	<.50
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	8.7	<5.0	<.50	<.50	<.50	<.50	<.50
	08/15/02	550	<0.50	<0.50	<0.50	<0.50	19	<5.0	<.50	<.50	<.50	<.50	<.50
	11/21/02 <sup>b</sup>	310	<0.50	<0.50	<0.50	<0.50	11	<5.0	<.50	<.50	<.50	<.50	<.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	0.85	NA	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	5.6	NA	NA	NA	NA	NA	NA
	08/29/03	330	<0.50	<0.50	<0.50	<0.50	11	NA	NA	NA	NA	NA	NA
	11/24/03	210	<0.5	<0.5	<0.5	<0.5	100	NA	NA	NA	NA	NA	NA
	02/17/04	280	2.9	<0.5	1.8	2.5	7.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	05/20/04	61	<0.5	<0.5	<0.5	<1.0	5.9	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	08/26/04	170	<0.5	<0.5	<0.5	<1.0	6.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/04	180	<0.5	<0.5	<0.5	<1.0	5.6	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/18/05	200	<0.5	<0.5	<0.5	<1.0	9.8	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW2	04/21/88	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	04/27/88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/14/89	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	07/28/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/29/89	ND	4.4	0.76	NA	1.53	NA	NA	NA	NA	NA	NA	NA
	10/04/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/21/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/28/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/07/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/19/90	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	04/20/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/05/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/01/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/14/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	08/15/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11/21/02 <sup>b</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Food and Liquor #50, 766 East Cotati Avenue, Cotati, California**  
**Page 2 of 8**

Sample ID	Date	(Reported in ug/l)											
		TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
MW2	08/29/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	11/24/03	51	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	02/17/04	<50	<0.50	<0.50	<0.50	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	08/27/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	12/02/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/17/05	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW3	04/21/88	ND	ND	ND	ND	2.2	NA	NA	NA	NA	NA	NA	NA
	04/27/88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/14/89	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	07/28/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/29/89	8,500	1,127	3,590	NA	1,770	NA	NA	NA	NA	NA	NA	NA
	10/04/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/21/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/28/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/07/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/19/90	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	04/20/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/16/99	100	<0.5	3.5	<0.5	<0.5	230	16	<3.0	<3.0	<3.0	NA	NA
	01/28/00 <sup>2</sup>	<50	<0.5	<0.5	<0.5	<0.5	1.2	<5	<1.0	<1.0	<1.0	NA	NA
	06/05/00	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	11/01/00	<50	<0.5	<0.5	<0.5	<0.5	1.1	<5.0	<1.0	<1.0	<1.0	NA	NA
	03/14/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50
	08/15/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50
	11/21/02 <sup>5</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	08/29/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	11/24/03	57	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	02/17/04	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	08/26/04	21,000	<0.5	<0.5	<0.5	<1.0	<0.5	46	<0.5	<0.5	<0.5	<0.5	<0.5
	12/02/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/17/05	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
DM1	04/19/89 <sup>1</sup>	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	06/14/89	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	07/28/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/29/89	ND	1.6	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	10/04/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/21/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/28/89	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	02/07/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/19/90	ND	0.78	1.20	NA	ND	NA	NA	NA	NA	NA	NA	NA
	04/20/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Food and Liquor #50, 766 East Cotati Avenue, Cotati, California**  
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Sample ID	Date	(Reported in ug/l)											
		TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
DM1	12/02/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/28/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/11/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	03/25/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/02/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	06/04/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/16/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	07/29/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	11/11/92	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	01/27/93	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	10/16/99	ND	ND	ND	ND	ND	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	01/28/00 <sup>2</sup>	ND	ND	ND	ND	ND	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	06/05/00	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	11/01/00	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	03/14/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50	<.50
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50	<.50
	08/15/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50	<.50
	11/21/02 <sup>5</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50	<.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	08/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	11/24/03	58	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	02/17/04	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	08/26/04	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	12/02/04	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	02/17/05	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
DM2	04/19/89 <sup>1</sup>	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	06/14/89	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	07/28/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/29/89	1,200	320	34	NA	245	NA	NA	NA	NA	NA	NA	NA
	10/04/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/21/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/28/89	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	02/07/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/19/90	ND	1.4	1.2	NA	ND	NA	NA	NA	NA	NA	NA	NA
	04/20/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/02/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/28/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/11/91	15	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	03/25/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/02/91	160	43	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	06/04/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/16/91	8,100	850	110	150	56	NA	NA	NA	NA	NA	NA	NA
	07/29/92	410	36	ND	ND	28	NA	NA	NA	NA	NA	NA	NA
	11/11/92	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Food and Liquor #50, 766 East Cotati Avenue, Cotati, California**  
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Sample ID	Date	(Reported in ug/l)											
		TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
DM2	01/27/93	17	0.56	ND	0.57	1.1	NA	NA	NA	NA	NA	NA	NA
	06/05/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/01/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/14/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50	<.50
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50	<.50
	08/15/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50	<.50
	11/21/02 <sup>5</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<.50	<.50	<.50	<.50	<.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	08/29/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	11/24/03	51	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	02/17/04	<50	<0.50	<0.50	<0.50	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	08/26/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	12/02/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/17/05	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
DM3	04/19/89 <sup>1</sup>	7,500	2,570	420	168	2,220	NA	NA	NA	NA	NA	NA	NA
	06/14/89	4,200	190	190	NA	580	NA	NA	NA	NA	NA	NA	NA
	07/28/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/29/89	2,100	440.0	490	NA	630	NA	NA	NA	NA	NA	NA	NA
	10/04/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/21/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/28/89	1,700	40	ND	NA	20	NA	NA	NA	NA	NA	NA	NA
	02/07/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/19/90	ND	8.9	1.5	NA	ND	NA	NA	NA	NA	NA	NA	NA
	04/20/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/02/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/28/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/11/91	74	0.65	0.37	ND	ND	NA	NA	NA	NA	NA	NA	NA
	03/25/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/02/91	19,000	96	560	480	1,600	NA	NA	NA	NA	NA	NA	NA
	06/04/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/16/91	33,000	560	240	1,000	3,300	NA	NA	NA	NA	NA	NA	NA
	07/29/92	11,000	420	110	580	1,500	NA	NA	NA	NA	NA	NA	NA
	11/11/92	180	6.1	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	01/27/93	1,400	17	2.3	44	79	NA	NA	NA	NA	NA	NA	NA
	10/16/99	ND	ND	ND	ND	ND	1.6	<5.0	<1.0	<1.0	<1.0	NA	NA
	01/28/00 <sup>3</sup>	230	<0.5	4.7	<0.5	<0.5	140	<5.0	<1.0	<1.0	<1.0	NA	NA
	06/05/00	<50	<0.5	<0.5	<0.5	<0.5	<5	<5.0	<1.0	<1.0	<1.0	NA	NA
	11/01/00	180	<0.5	4.1	<0.5	0.51	NA	<5.0	<1.0	<1.0	<1.0	NA	NA
	03/14/02	240	<0.50	<0.50	<0.50	<0.50	26	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	05/30/02	210	<0.50	<0.50	<0.50	<0.50	17	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	08/15/02	370	<0.50	<0.50	<0.50	<0.50	22	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Food and Liquor #50, 766 East Cotati Avenue, Cotati, California**  
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Sample ID	Date	(Reported in ug/l)											
		TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
DM3	11/21/02 <sup>5</sup>	110	<0.50	<0.50	<0.50	<0.50	3.6	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	1.4	NA	NA	NA	NA	NA	NA
	05/30/03	170	<0.50	<0.50	<0.50	<0.50	16	NA	NA	NA	NA	NA	NA
	08/29/03	210	<0.50	<0.50	<0.50	<0.50	12	NA	NA	NA	NA	NA	NA
	11/24/03	170	<0.50	<0.50	<0.50	<0.50	61	NA	NA	NA	NA	NA	NA
	02/17/04	170	1.5	0.5	1.2	2.0	13	9.0	<0.5	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<1.0	14	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	08/27/04	<50	<0.5	<0.5	<0.5	<1.0	7.3	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/04	100	<0.5	<0.5	<0.5	<1.0	7.6	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/18/05	<50	<0.5	<0.5	<0.5	<1.0	5.3	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
DM4	04/19/89 <sup>1</sup>	1,050	163	80	150	417	NA	NA	NA	NA	NA	NA	NA
	06/14/89	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	07/28/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/29/89	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	10/04/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/21/89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/28/89	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	02/07/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/19/90	ND	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA	NA
	04/20/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/02/90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/28/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/11/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	03/25/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/02/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	06/04/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/16/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	07/29/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	11/11/92	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	01/27/93	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	10/16/99	ND	ND	ND	ND	ND	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	01/28/00 <sup>2</sup>	ND	ND	ND	ND	ND	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	06/05/00	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	11/01/00	<50	<0.5	<0.5	<0.5	<0.5	1.4	<5.0	<1.0	<1.0	<1.0	NA	NA
	03/14/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	08/15/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	11/21/02 <sup>5</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	08/29/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	11/24/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Food and Liquor #50, 766 East Cotati Avenue, Cotati, California**  
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Sample ID	Date	(Reported in ug/l)											
		TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
DM4	02/17/04	<50	<0.50	<0.50	<0.50	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	08/27/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/18/05	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
DM5	02/11/91 <sup>4</sup>	21	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	03/25/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/02/91	910	96	0.53	8.2	67	NA	NA	NA	NA	NA	NA	NA
	06/04/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/16/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	07/29/92 <sup>4</sup>	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	11/11/92 <sup>4</sup>	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	01/27/93 <sup>4</sup>	530	42	8.1	15	57	NA	NA	NA	NA	NA	NA	NA
	10/16/99	650	ND	0.6	ND	ND	180	<25	<5.0	<5.0	<5.0	NA	NA
	01/28/00 <sup>2</sup>	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<5	<1.0	<1.0	<1.0	NA	NA
	06/05/00	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	11/01/00	<50	<0.5	<0.5	<0.5	<0.5	20	<5.0	<1.0	<1.0	<1.0	NA	NA
	03/14/02 <sup>6</sup>	<50	<.50	<.50	<.50	<.50	6.9	<5.0	<.50	<.50	<.50	<.50	<.50
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	6.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	08/15/02	<50	<0.50	<0.50	<0.50	<0.50	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	11/21/02 <sup>5</sup>	<50	<0.50	<0.50	<0.50	<0.50	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	08/29/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	11/24/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	02/17/04	<50	<0.50	<0.50	<0.50	<0.50	<1.0	8.1	<5.0	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<1.0	9.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	08/27/04	<50	<0.5	<0.5	<0.5	<1.0	6.1	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/04	<50	<0.5	<0.5	<0.5	<1.0	5.0	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/18/05	<50	<0.5	<0.5	<0.5	<1.0	6.6	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
DM6	02/11/91 <sup>1</sup>	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	03/25/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/02/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	06/04/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/16/91	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	07/29/92	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	11/11/92	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	01/27/93	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	10/16/99	ND	ND	ND	ND	ND	99	<15	<3	<3	<3	NA	NA
	01/28/00 <sup>2</sup>	ND	ND	ND	ND	ND	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	06/05/00	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	11/01/00	<50	<0.5	<0.5	<0.5	<0.5	61	<5.0	<1.0	<1.0	<1.0	NA	NA
	03/14/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	08/15/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Food and Liquor #50, 766 East Cotati Avenue, Cotati, California**  
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Sample ID	Date	(Reported in ug/l)											
		TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
DM6	11/21/02 <sup>5</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	08/29/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	11/24/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	02/17/04	<50	<0.50	<0.50	<0.50	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	08/27/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	12/02/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/18/05	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
DM7	01/27/03 <sup>1</sup>	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	10/16/99	ND	ND	ND	ND	ND	60	<5.0	<1.0	<1.0	<1.0	NA	NA
	01/28/00 <sup>2</sup>	ND	ND	ND	ND	ND	<1.0	<5.0	<1.0	<1.0	<1.0	NA	NA
	06/05/00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	6.7	<1.0	<1.0	<1.0	NA
	11/01/00	<50	<0.5	<0.5	<0.5	<0.5	35	<5.0	<1.0	<1.0	<1.0	NA	NA
	03/14/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	08/15/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	11/21/02 <sup>5</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	08/29/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	11/24/03	51	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
	02/17/04	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	08/27/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/04	<50	<0.5	<0.5	<0.5	<1.0	1.9	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/18/05	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
DM8	01/27/03 <sup>1</sup>	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
	06/05/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/01/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RPMUNI4 Municipal Well	03/14/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	05/30/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	08/15/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	11/21/02 <sup>5</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	02/28/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	08/29/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/24/03	68	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	02/17/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**Former Food and Liquor #50, 766 East Cotati Avenue, Cotati, California**  
**Page 8 of 8**

Sample ID	Date	(Reported in ug/l)											
		TPHg	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
<b>Domestic Well</b>	DW2	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	11/21/02 <sup>5</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50
	02/28/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	05/30/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	08/29/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	11/24/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	02/17/04	<50	<0.50	<0.50	<0.50	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	05/20/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	08/26/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	12/02/04	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
	02/17/05	<50	<0.5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5

**Notes:**

ug/l denotes micrograms per liter

Groundwater laboratory analytical results prior to March 14, 2002, were provided by The Customer Company.

TPHg denotes Total Petroleum Hydrocarbons as gasoline analyzed by EPA Method 5030/8015/8260B

MTBE denotes methyl tertiary butyl ether analyzed by EPA Method 8260B

DIPE denotes di-isopropyl ether analyzed by EPA Method 8260B

TAME denotes tertiary amyl methyl ether analyzed by EPA Method 8260B

TBA denotes tertiary butyl ether analyzed by EPA Method 8260B

ETBE denotes ethyl tertiary butyl ether analyzed by EPA Method 8260B

1,2-DCA denotes 1,2-dichloroethane analyzed by EPA Method 8260B

EDB denotes ethyl dibromide analyzed by EPA Method 8260B

NS denotes not sampled

ND denotes non detected

NA denotes not analyzed

< denotes not measured at or above stated detection limit

Data prior to November 2003 was obtained from H<sub>2</sub>O Geologic historical reports

<sup>1</sup> Well Installation

<sup>2</sup> MTBE by EPA 8020 was not detected. See Lab Report for Detection Limits.

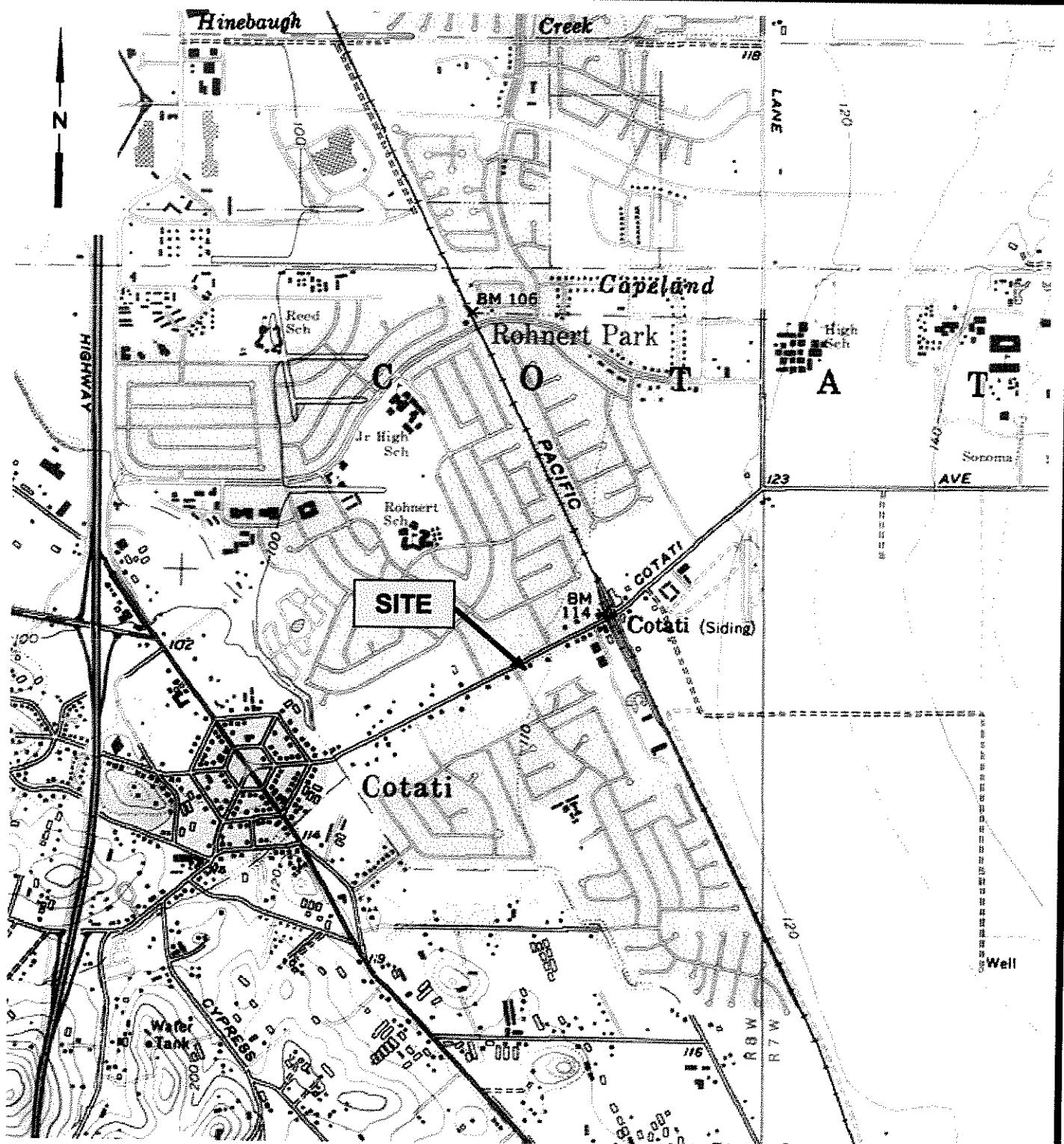
<sup>3</sup> MTBE by EPA 8020 was 140ppb.

<sup>4</sup> Nitrates were detected in groundwater well (DM5) on 01/31/91 at 20ppm; 09/03/91 at 11ppm; 07/29/92 at 4.1 ppm; 11/11/92 at 0.74 ppm and 01/27/93 at 3.1 ppm.

<sup>5</sup> Ethanol was detected in groundwater on 11/21/02 for all wells at concentrations of : MW1 <5.0, MW2<5.0, MW3<5.0 , DM1<5.0, DM2<5.0, DM3<5.0, DM4<5.0, DM5<5.0, DMM6<5.0, DM7<5.0, RPMUNI4 <5.0, and DW2<6.2, in parts per billion (ppb)

<sup>6</sup> Nitrate as NO<sub>3</sub> was detected at 0.53 ppm.

<sup>7</sup> Sample chromatogram does not match the standard gasoline chromatogram.



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP  
COTATI QUADRANGLE, CALIFORNIA, DATED 1979.



1117 Lone Palm Ave, Ste B  
Modesto, CA 95351  
(209) 579-2221

PROJECT NO: 54.25847.0050

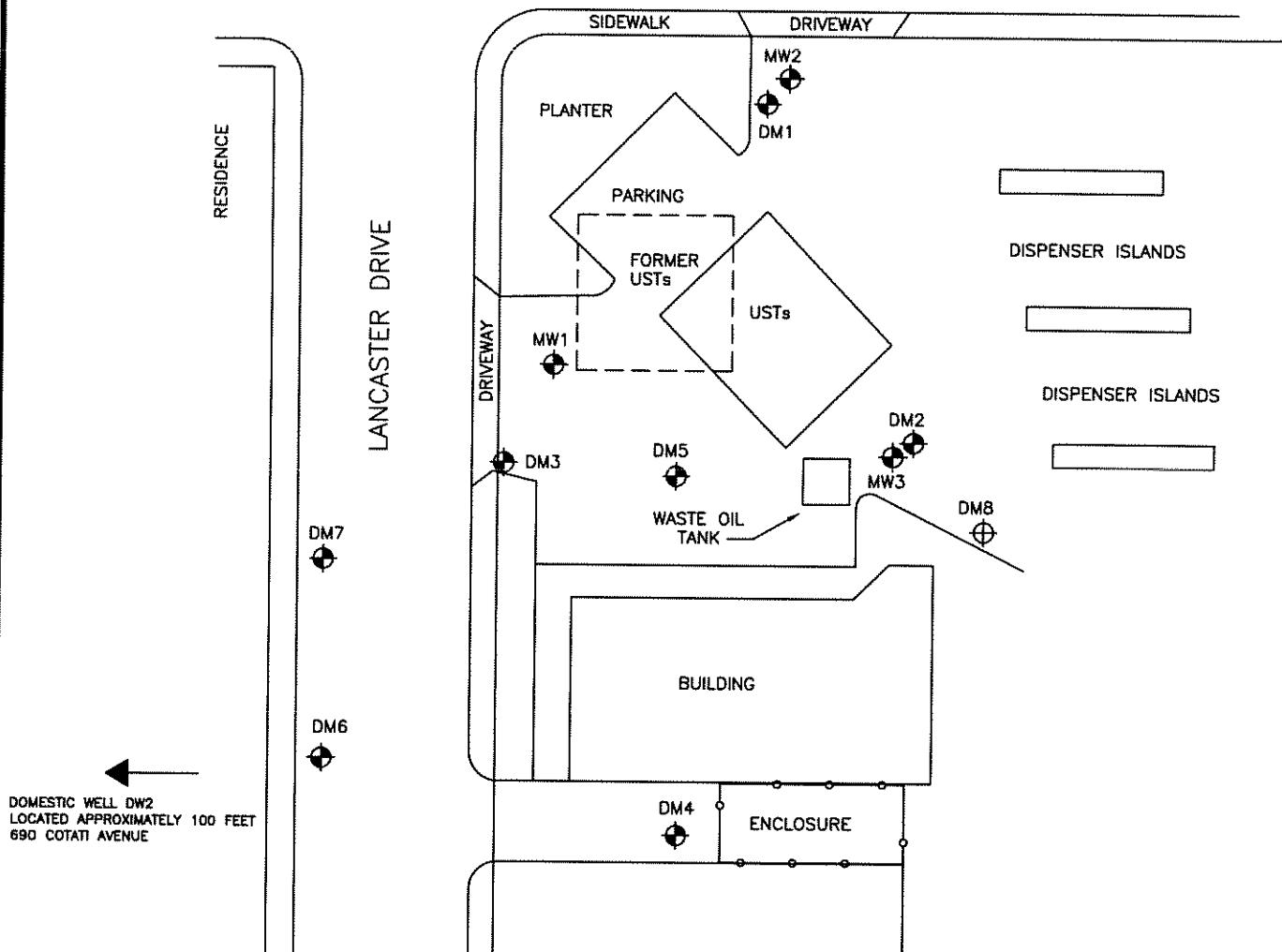
DESIGNED BY: NC	SCALE: 1:24,000	REVIEWED BY: JH
DRAWN BY: NC	DATE: 04/05	FILE: LOCATION

**FIGURE 1**

**VICINITY MAP**

FORMER FOOD AND LIQUOR #50  
766 EAST COTATI AVENUE  
COTATI, CALIFORNIA

EAST COTATI AVENUE



LEGEND:

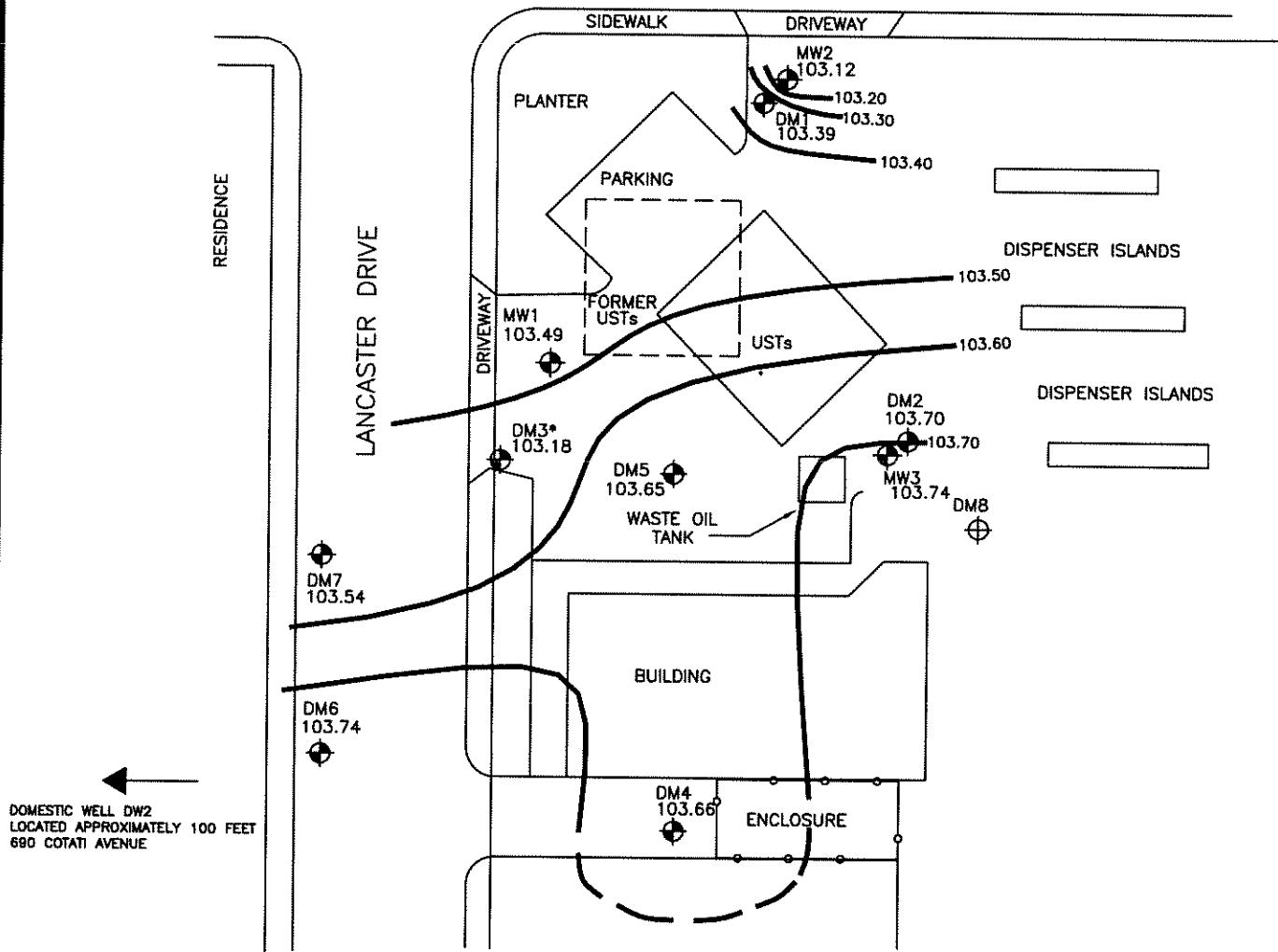
- MONITORING WELL LOCATION
- ✖ DESTROYED GROUNDWATER MONITORING WELL

APPROXIMATE SCALE IN FEET



FIGURE:  
**2**

## EAST COTATI AVENUE



**LEGEND:**

- MONITORING WELL LOCATION
- ✖ DESTROYED GROUNDWATER MONITORING WELL

103.70 GROUNDWATER ELEVATION

103.50 GROUNDWATER ELEVATION (02/17/05)  
CONTOUR INTERVAL = 0.10 FT

DM3\* DM3 APPEARS ANAMOLOUS AND WAS NOT USED  
IN DEVELOPING THE CONTOURS.



FORMER FOOD AND LIQUOR #50  
766 EAST COTATI AVENUE  
COTATI, CALIFORNIA

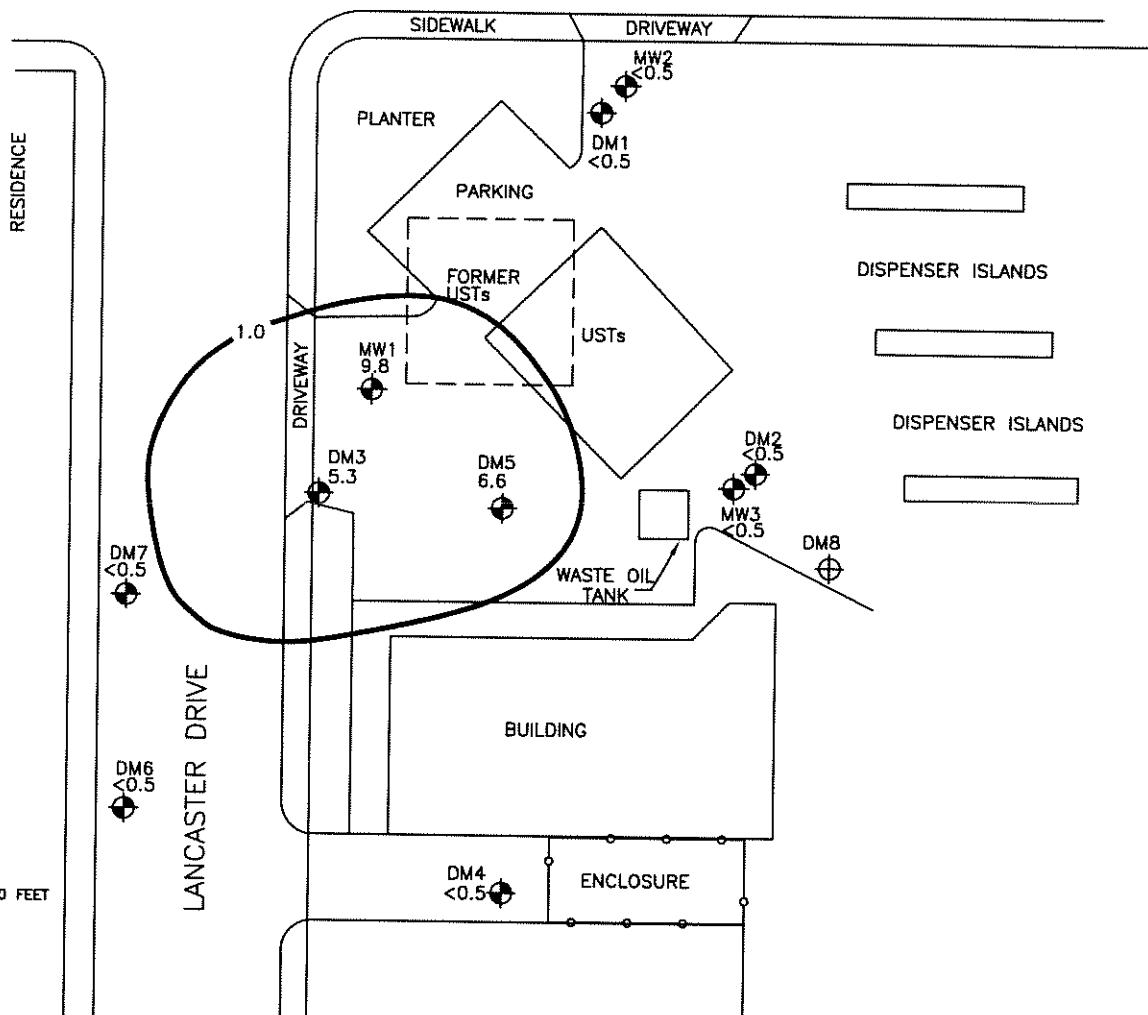
GROUNDWATER GRADIENT MAP  
FEBRUARY 17, 2005

PROJECT #: 54.25847.0050

APRIL 2005

FIGURE:  
**3**

EAST COTATI AVENUE



FORMER FOOD AND LIQUOR #50  
766 EAST COTATI AVENUE  
COTATI, CALIFORNIA

MTBE ISOCONCENTRATION MAP  
FEBRUARY 17, 2005

PROJECT #: 54.25847.0050

APRIL 2005

FIGURE:  
4

## **Attachment 1**

**Field Report**

Date February 17-18, 2004

Project Name: Customer Company - Cotati #50

Field Office: ATC Associates Inc

Project No.: 54.25847.Q050

Task No. 53001

3600 Madison Avenue Suite 64

Location: 766 E. Cotati Ave., Cotati, CA

North Highlands California 95660

Weather Rainy

Temperature 50-60's

Client

Scope of Work:

Contractor

XX Monitoring          Assessment          Remediation

ATC Representative(s) Michael Sperber

Page 1 of 1

Arrive on site

Meet with store manager

Inspect and gauge wells

Calibrate YSI 63 to a Ph of 7.0

Purge and sample all wells in order of 2M, 3M, 1D, 2D, 6D, 7D, 4D, 5D, 3D, 1M

9

drums of purged water

9

drums on site

MW's locked and secure (refer to log)

Depart Site

Wells need replacement (refer to MW inspection log)

Equipment Used:

Contractor Hours

Staff / Technician Hours:

Mileage:

Copies To:

Project Manager:

Reviewed By:



Date: 17-Feb-05

## Monitoring Well Inspection Log

Project	Customer Company - Cotati #50		Project No.	54.25847.0050	
Location	766 E. Cotati Ave., Cotati, CA		ATC Rep	Mike Sperber	
Well No.:	MW-1	Type: <b>FLUSH</b> [flush well box, vault, or monument]	Well No.:	MW-2	Type: <b>FLUSH</b> [flush well box, vault, or monument]
<b>CONSTRUCTION DETAIL</b>	<b>CONDITION</b> [secure, good, poor, bad, yes, no, etc.]		<b>CONSTRUCTION DETAIL</b>	<b>CONDITION</b> [secure, good, poor, bad, yes, no, etc.]	
SECURITY VAULT	Poor		SECURITY VAULT	Poor	
SURFACE SEAL	\\		SURFACE SEAL	\\	
ANNULEAR SEAL	\\		ANNULEAR SEAL	\\	
LOCKING CAP	\\		LOCKING CAP	\\	
ATC LOCK	None		ATC LOCK	None	
Comments:					
Comments:					
Well No.:	MW-3	Type: <b>FLUSH</b> [flush well box, vault, or monument]	Well No.:	DM-1	Type: <b>FLUSH</b> [flush well box, vault, or monument]
<b>CONSTRUCTION DETAIL</b>	<b>CONDITION</b> [secure, good, poor, bad, yes, no, etc.]		<b>CONSTRUCTION DETAIL</b>	<b>CONDITION</b> [secure, good, poor, bad, yes, no, etc.]	
SECURITY VAULT	Secure		SECURITY VAULT	Poor	
SURFACE SEAL	\\		SURFACE SEAL	\\	
ANNULEAR SEAL	\\		ANNULEAR SEAL	\\	
LOCKING CAP	\\		LOCKING CAP	Secure	
ATC LOCK	\\		ATC LOCK	\\	
Comments:					
Comments:					
Well No.:	DM-2	Type: <b>FLUSH</b> [flush well box, vault, or monument]	Well No.:	DM-3	Type: <b>FLUSH</b> [flush well box, vault, or monument]
<b>CONSTRUCTION DETAIL</b>	<b>CONDITION</b> [secure, good, poor, bad, yes, no, etc.]		<b>CONSTRUCTION DETAIL</b>	<b>CONDITION</b> [secure, good, poor, bad, yes, no, etc.]	
SECURITY VAULT	Secure		SECURITY VAULT	Poor	
SURFACE SEAL	\\		SURFACE SEAL	\\	
ANNULEAR SEAL	\\		ANNULEAR SEAL	\\	
LOCKING CAP	\\		LOCKING CAP	Secure	
ATC LOCK	\\		ATC LOCK	\\	
Comments:					
Comments:					



Date: 17-Feb-05

## Monitoring Well Inspection Log

Project	Customer Company - Cotati #50		Project No.	54.25847.0050	
Location	766 E. Cotati Ave., Cotati, CA		ATC Rep	Mike Sperber	
Well No.:	DM-4	Type: FLUSH [flush well box, vault, or monument]	Well No.:	DM-5	Type: FLUSH [flush well box, vault, or monument]
CONSTRUCTION DETAIL	CONDITION [secure, good, poor, bad, yes, no, etc.]		CONSTRUCTION DETAIL	CONDITION [secure, good, poor, bad, yes, no, etc.]	
SECURITY VAULT	Poor		SECURITY VAULT	Poor	
SURFACE SEAL	"		SURFACE SEAL	"	
ANNULAR SEAL	"		ANNULAR SEAL	"	
LOCKING CAP	Secure		LOCKING CAP	Secure	
ATC LOCK	"		ATC LOCK	"	
Comments:					
Comments:					
Well No.:	DM-6	Type: FLUSH [flush well box, vault, or monument]	Well No.:	DM-7	Type: FLUSH [flush well box, vault, or monument]
CONSTRUCTION DETAIL	CONDITION [secure, good, poor, bad, yes, no, etc.]		CONSTRUCTION DETAIL	CONDITION [secure, good, poor, bad, yes, no, etc.]	
SECURITY VAULT	Poor		SECURITY VAULT	Secure	
SURFACE SEAL	"		SURFACE SEAL	"	
ANNULAR SEAL	"		ANNULAR SEAL	"	
LOCKING CAP	Secure		LOCKING CAP	"	
ATC LOCK	Poor		ATC LOCK	"	
Comments:					
Comments:					
Well No.:	DM-8	Type: FLUSH [flush well box, vault, or monument]	Well No.:	DW-2	Type: FLUSH [flush well box, vault, or monument]
CONSTRUCTION DETAIL	CONDITION [secure, good, poor, bad, yes, no, etc.]		CONSTRUCTION DETAIL	CONDITION [secure, good, poor, bad, yes, no, etc.]	
SECURITY VAULT	Secure		SECURITY VAULT	Secure	
SURFACE SEAL	"		SURFACE SEAL	None	
ANNULAR SEAL	"		ANNULAR SEAL	"	
LOCKING CAP	"		LOCKING CAP	"	
ATC LOCK	"		ATC LOCK	"	
Comments:					
Comments:					



## MONITORING WELL GAUGING LOG

Project Name: Customer Company - Cotati #50

Date: 2/17/2005

Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California

Project No.: 54.25847.Q050

ATC Representative: Mike Sperber

Reviewed by:

Well ID No.	Previous Depth To Water (feet)	Gauging Time	Depth To Free Product (feet)	Depth To Water (feet)	Free Product Thickness (feet)	Total Casing Depth (feet)	Surveyed Top of Casing Elevation (AMSL)		Groundwater Elevation (AMSL)	Corrected Groundwater Elevation <sup>1</sup> (AMSL)
							Reviewed by:	Project No.:		
MW-2	9.72		X	6.60	X	24.20				
MW-3	11.32		X	7.61	X	28.33				
DM-1	10.47		X	7.21	X	30.35				
DM-2	11.54		X	7.84	X	30.82				
DM-6	11.36		X	6.38	X	44.77				
DM-7	11.24		X	6.76	X	35.66				
DM-4	11.98		X	7.50	X	40.00				
DM-5	11.54		X	7.39	X	44.85				
DM-3	11.27		X	7.41	X	40.01				
MW-1	10.48		X	6.71	X	24.34				
DW-2	18.56		X	10.29	X	X				
RP-Muni	Inaccessible		X			X				

Notes:

ID = Identification.

AMSL = Above mean sea level (in feet).

SHEEN = Discontinuous, non-measurable thickness of free product.  
TRACE = Continuous, non-measurable thickness of free product.

ft = Feet.

<sup>1</sup> = Elevation adjusted by adding (0.75 x free product thickness)  
to measured water elevation.



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: MW-1

Project Name: Customer Company - Cotati #50		Project No.: 54.25847.0050								
Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California										
<b>PURGING &amp; SAMPLING INSTRUMENTATION &amp; METHOD</b>										
Water Level Meter (Model/ID): EL		Interface Probe (Model/ID):								
Water Quality Meter (Model/ID): YSI 63		Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)								
Purging Method: PVC Bailer      Vacuum Truck		Submersible Pump <input checked="" type="checkbox"/> Other: Honda Pump								
Sampling Method: Teflon Bailer <input checked="" type="checkbox"/> Disposable Bailer		Other:								
<b>BOREHOLE &amp; WELL CASING VOLUME INFORMATION</b>										
Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	<input checked="" type="checkbox"/> 2"	4"	6"	12"	18"	24"
Borehole Multiplier (BM)(gallons/root):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/root):	<input checked="" type="checkbox"/> 0.16	0.65	1.47	5.87	13.2	23.5
<b>MONITORING MEASUREMENTS</b>		<b>PURGING CALCULATIONS</b>								
Depth to Free Product (feet): X		Borehole Volumes (BV):								
Depth to Water (DTW)(feet): 6.71		WC _____ x BM _____ = _____ (BV)(gal) x 1.5 BV (gal):								
Total Well Depth (feet): 24.34		Casing Volumes (CV):								
Water Column (WC)(feet): 17.63		WC 17.63 x CM 0.16 = 2.8 (CV)(gal) x 3.0 CV (gal): 8.5								
Free Product Thickness (feet): X		Free Product Purged (gallons):								
<b>PURGING DATA</b>										
Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity ( $\mu$ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)		
15/11	Purging Start Time									
12		2	18.1	6.70	687	X	N/A	Y/N		
14		4	18.8	6.56	634					
16		6	19.3	6.31	656	X				
18		8	19.3	6.47	778					
		8.5	Total Gallons Purged							
19	Purging End Time									
<b>SAMPLING DATA</b>										
Time Sampled: 1620		Depth to Water @ Sample Time (DTWs): 6.70								
Container Types, Volumes, & Quantities		Filtered (yes/no)	Sample Preservatives		Analytical Parameters (cross-out all NOT applicable)					
4 Voas		No	HCl							
<b>WELL RECOVERY DATA</b>										
Maximum Drawdown (DTW <sub>m</sub> ) (feet):		Approximate Flow Rate (GPM):								
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100		Recovery Calculation: % Recovery = 1 $\left( \frac{-}{-} \right) \times 100$								
Recovery Type: Fast Slow		% Recovery = _____								
<b>FIELD PERSONNEL</b>										
ATC Representative(s): Mike Sperber										
Subcontractor:										

Signature:

Date: 2/18/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: MW-2

Project Name: Customer Company - Cotati #50		Project No.: 54.25847.0050									
Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California											
<b>PURGING &amp; SAMPLING INSTRUMENTATION &amp; METHOD</b>											
Water Level Meter (Model/ID): EI		Interface Probe (Model/ID):									
Water Quality Meter (Model/ID): YSI 63		Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)									
Purging Method: PVC Bailer		Vacuum Truck	Submersible Pump <input checked="" type="checkbox"/> Other: Honda Pump								
Sampling Method: Teflon Bailer <input checked="" type="checkbox"/>		Disposable Bailer <input type="checkbox"/>	Other:								
<b>BOREHOLE &amp; WELL CASING VOLUME INFORMATION</b>											
Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2" <input checked="" type="checkbox"/>	4" <input type="checkbox"/>	6" <input type="checkbox"/>	12" <input type="checkbox"/>	18" <input type="checkbox"/>	24" <input type="checkbox"/>	
Borehole Multiplier (BM)(gallons/foot):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/foot):	0.16 <input checked="" type="checkbox"/>	0.65 <input type="checkbox"/>	1.47 <input type="checkbox"/>	5.87 <input type="checkbox"/>	13.2 <input type="checkbox"/>	23.5 <input type="checkbox"/>	
<b>MONITORING MEASUREMENTS</b>				<b>PURGING CALCULATIONS</b>							
Depth to Free Product (feet): X		Borehole Volumes (BV):									
Depth to Water (DTW)(feet): 6.60		WC _____ x BM _____ = _____ (BV)(gal) x 1.5 BV (gal):									
Total Well Depth (feet): 24.20		Casing Volumes (CV):									
Water Column (WC)(feet): 17.6		WC 17.6 x CM 0.16 = 28 (CV)(gal) x 3.0 CV (gal): 84									
Free Product Thickness (feet): X		Free Product Purged (gallons):									
<b>PURGING DATA</b>											
Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity ( $\mu$ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)			
1300	Purging Start Time										
02		2	18.8	7.83	727	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	mod	N.		
04		4	19.0	7.69	690	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N.			
06		6	19.0	7.54	67675	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
08		8	19.2	7.47	671	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
		8.4	Total Gallons Purged								
CF	Purging End Time										
<b>SAMPLING DATA</b>											
Time Sampled: 1615				Depth to Water @ Sample Time (DTWs): 6.6							
Container Types, Volumes, & Quantities				Filtered (yes/no)	Sample Preservatives		Analytical Parameters (cross-out all NOT applicable)				
4 Voas				No	HC1						
<b>WELL RECOVERY DATA</b>											
Maximum Drawdown (DTW <sub>m</sub> )(feet):				Approximate Flow Rate (GPM):							
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100				Recovery Calculation: % Recovery = 1 $\frac{(\quad - \quad)}{(\quad - \quad)}$ x 100							
Recovery Type: Fast Slow				% Recovery =							
<b>FIELD PERSONNEL</b>											
ATC Representative(s): Mike Sperber											
Subcontractor:											

Signature:

Date: 2/17/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: MW-3

Project Name: Customer Company - Cotati #50		Project No.: 54.25847.0050									
Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California											
<b>PURGING &amp; SAMPLING INSTRUMENTATION &amp; METHOD</b>											
Water Level Meter (Model/ID): EI		Interface Probe (Model/ID):									
Water Quality Meter (Model/ID): YSI 63		Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)									
Purging Method:	PVC Bailer	Vacuum Truck									
Sampling Method:	Teflon Bailer	<input checked="" type="checkbox"/> Disposable Bailer									
<b>BOREHOLE &amp; WELL CASING VOLUME INFORMATION</b>											
Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4"	6"	12"	18"	24"	
Borehole Multiplier (BM)(gallons/root):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/root):	0.16	0.65	1.47	5.87	13.2	23.5	
<b>MONITORING MEASUREMENTS</b>		<b>PURGING CALCULATIONS</b>									
Depth to Free Product (feet): X		Borehole Volumes (BV):									
Depth to Water (DTW)(feet): 7.61		WC _____ x BM _____ = (BV)(gal) x 1.5 BV (gal): _____									
Total Well Depth (feet): 28.33		Casing Volumes (CV):									
Water Column (WC)(feet): 20.72		WC 20.72 x CM 0.16 = 3.3 (CV)(gal) x 3.0 CV (gal): 9.9									
Free Product Thickness (feet): X		Free Product Purged (gallons):									
<b>PURGING DATA</b>											
Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity ( $\mu$ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)			
1315	Purging Start Time										
17		2	19.2	7.20	742		X	Mod	Yes		
19		4	19.6	7.65	841			No	No		
21		6	19.0	7.01	878						
23		8	18.9	6.89	875						
		9.9	Total Gallons Purged								
	Purging End Time										
<b>SAMPLING DATA</b>											
Time Sampled: 1630		Depth to Water @ Sample Time (DTWs): 7.60									
Container Types, Volumes, & Quantities		Filtered (yes/no)	Sample Preservatives		Analytical Parameters (cross-out all NOT applicable)						
4 Voas		No	HC1								
<b>WELL RECOVERY DATA</b>											
Maximum Drawdown (DTW <sub>m</sub> )(feet):		Approximate Flow Rate (GPM):									
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100		Recovery Calculation: % Recovery = 1 $\frac{(\text{_____} - \text{_____})}{(\text{_____} - \text{_____})}$ x 100									
Recovery Type: <input type="checkbox"/> Fast <input type="checkbox"/> Slow		% Recovery = _____									
<b>FIELD PERSONNEL</b>											
ATC Representative(s): Mike Sperber											
Subcontractor:											

Signature:

Date: 2/17/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: **DM-1**

Project Name: Customer Company - Cotati #50	Project No.: 54.25847.0050
---------------------------------------------	----------------------------

Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California

## **PURGING & SAMPLING INSTRUMENTATION & METHOD**

Water Level Meter (Model/ID): EI	Interface Probe (Model/ID):
Water Quality Meter (Model/ID): YSI 63	Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)
Purging Method: PVC Bailer	Vacuum Truck
Sampling Method: Teflon Bailer	X Disposable Bailer

## **BOREHOLE & WELL CASING VOLUME INFORMATION**

Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4"	6"	12"	18"	24"
Borehole Multiplier (BM)(gallons/foot):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/foot):	0.16	0.65	1.47	5.87	13.2	23.5

## **MONITORING MEASUREMENTS**

## **PURGING CALCULATIONS**

Depth to Free Product (feet): X	Borehole Volumes (BV):
Depth to Water (DTW)(feet): 7.2	WC x BM = (BV)(gal) x 1.5 BV (gal):
Total Well Depth (feet): 39.36	Casing Volumes (CV):
Water Column (WC)(feet): 32.15	WC 32.15 x CM 0.65 = 20 (CV)(gal) x 3.0 CV (gal): 67
Free Product Thickness (feet): X	Free Product Purged (gallons):

## **PURGING DATA**

Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity ( $\mu$ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)
1335	Purging Start Time							
45		10	18.3	6.75	650	X	No	No
55		20	18.7	7.66	619			
1405		30	18.9	6.57	616	X		
15		40	19.0	6.57	608			
		62	Total Gallons Purged					

1437 Purging End Time

## **SAMPLING DATA**

Time Sampled: 1445	Depth to Water @ Sample Time (DTWs): 7.20	
Container Types, Volumes, & Quantities	Filtered (yes/no)	Analytical Parameters (cross-out all NOT applicable)
4 Voas	No	HCl

## **WELL RECOVERY DATA**

Maximum Drawdown (DTWm) (feet):	Approximate Flow Rate (GPM):
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100	Recovery Calculation: % Recovery = 1 - $\frac{(\quad - \quad)}{(\quad - \quad)}$ x 100
Recovery Type: Fast Slow	% Recovery = _____

## **BILLED PERSONNEL**

ATC Representative(s): Mike Sperber
Subcontractor:

Signature:

Date: 2/17/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: **DM-2**

Project Name: Customer Company - Cotati #50	Project No.: 54.25847.0050
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Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California

## **PURGING & SAMPLING INSTRUMENTATION & METHOD**

Water Level Meter (Model/ID): EI	Interface Probe (Model/ID):
Water Quality Meter (Model/ID): YSI 63	Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)
Purging Method: PVC Bailer	Vacuum Truck
Sampling Method: Teflon Bailer	X Disposable Bailer

## **BOREHOLE & WELL CASING VOLUME INFORMATION**

Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4"	6"	12"	18"	24"
Borehole Multiplier (BM)(gallons/root):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/root):	0.16	0.65	1.47	5.87	13.2	23.5

## **MONITORING MEASUREMENTS**

## **PURGING CALCULATIONS**

Depth to Free Product (feet): X	Borehole Volumes (BV):	
Depth to Water (DTW)(feet): 7.84	WC _____ x BM _____ = _____ (BV)(gal) x 1.5 BV (gal):	
Total Well Depth (feet): 39.82	Casing Volumes (CV):	
Water Column (WC)(feet): 31.98	WC 39.18 x CM 0.65 = 20.7 (CV)(gal) x 3.0 CV (gal): 62	
Free Product Thickness (feet): X	Free Product Purged (gallons):	

## **PURGING DATA**

Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity (μ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)
1456	Purging Start Time							
1500		16	18.5	6.61	6.98		X	N.
10		20	18.9	6.54	6.94		X	N.
20		30	18.9	6.45	6.68		X	
30		40	18.9	6.48	6.51		X	
		67	Total Gallons Purged					
52	Purging End Time							

## **SAMPLING DATA**

Time Sampled: 1700	Depth to Water @ Sample Time (DTW <sub>s</sub> ): 7.84	
Container Types, Volumes, & Quantities	Filtered (yes/no)	Analytical Parameters (cross-out all NOT applicable)
4 Voas	No	HC1

## **WELL RECOVERY DATA**

Maximum Drawdown (DTW <sub>m</sub> ) (feet):	Approximate Flow Rate (GPM):
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100	Recovery Calculation: % Recovery = 1 $\frac{(\quad - \quad)}{(\quad - \quad)} \times 100$
Recovery Type: Fast Slow	% Recovery = _____

## **FIELD PERSONNEL**

ATC Representative(s): Mike Sperber
Subcontractor:

Signature:

Date: 2/17/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: DM-3

Project Name: Customer Company - Cotati #50	Project No.: 54.25847.0050
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Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California

## **PURGING & SAMPLING INSTRUMENTATION & METHOD**

Water Level Meter (Model/ID): EI	Interface Probe (Model/ID):
Water Quality Meter (Model/ID): YSI 63	Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)
Purging Method: <input type="checkbox"/> PVC Bailer <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Submersible Pump <input checked="" type="checkbox"/> Other: Honda Pump	
Sampling Method: <input type="checkbox"/> Teflon Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Other:	

## **BOREHOLE & WELL CASING VOLUME INFORMATION**

Borehole Diameter (Circle): 8"	10"	12"	Casing Diameter (Circle): 2" <input checked="" type="radio"/> 4" <input type="radio"/> 6" <input type="radio"/> 12" <input type="radio"/> 18" <input type="radio"/> 24"	
Borehole Multiplier (BM)(gallons/root): 0.81	1.5	1.95	Casing Multiplier (CM)(gallons/root): 0.16 <input checked="" type="radio"/> 0.65 <input type="radio"/> 1.47 <input type="radio"/> 5.87 <input type="radio"/> 13.2 <input type="radio"/> 23.5	

## **MONITORING MEASUREMENTS**

## **PURGING CALCULATIONS**

Depth to Free Product (feet): X	Borehole Volumes (BV):
Depth to Water (DTW)(feet): 7.41	WC <input type="checkbox"/> x BM <input type="checkbox"/> = <input type="checkbox"/> (BV)(gal) x 1.5 BV (gal):
Total Well Depth (feet): 40.01	Casing Volumes (CV):
Water Column (WC)(feet): 32.6	WC 32.6 x CM 0.65 = 21.1 (CV)(gal) x 3.0 CV (gal): 64
Free Product Thickness (feet): X	Free Product Purged (gallons):

## **PURGING DATA**

Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity ( $\mu$ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)
1400	Purging Start Time							
20		20	17.9	6.66	684	/	100	Yes
40		40	18.7	6.61	496	/		
1500		60	19.0	6.57	700	/		
03		63	18.5	6.61	702	/		
		64	Total Gallons Purged					
04	Purging End Time							

## **SAMPLING DATA**

Time Sampled: 1610	Depth to Water @ Sample Time (DTWs): 141
Container Types, Volumes, & Quantities 4 Voas	Filtered (yes/no) No
	Sample Preservatives HC1

## **WELL RECOVERY DATA**

Maximum Drawdown (DTW <sub>m</sub> ) (feet):	Approximate Flow Rate (GPM):
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100	Recovery Calculation: % Recovery = 1 $\left( \frac{-}{-} \right)$ x 100
Recovery Type: <input type="checkbox"/> Fast <input type="checkbox"/> Slow	% Recovery = _____

## **FIELD PERSONNEL**

ATC Representative(s): Mike Sperber
Subcontractor:

Signature:

Date: 2/18/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: DM-4

Project Name: Customer Company - Cotati #50		Project No.: 54.25847.0050									
Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California											
<b>PURGING &amp; SAMPLING INSTRUMENTATION &amp; METHOD</b>											
Water Level Meter (Model/ID): EI		Interface Probe (Model/ID):									
Water Quality Meter (Model/ID): YSI 63		Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)									
Purging Method: <input type="checkbox"/> PVC Bailer <input type="checkbox"/> Vacuum Truck		<input type="checkbox"/> Submersible Pump <input checked="" type="checkbox"/> Other: Honda Pump									
Sampling Method: <input type="checkbox"/> Teflon Bailer <input checked="" type="checkbox"/> Disposable Bailer		<input type="checkbox"/> Other:									
<b>BOREHOLE &amp; WELL CASING VOLUMIC INFORMATION</b>											
Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4"	6"	12"	18"	24"	
Borehole Multiplier (BM)(gallons/root):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/root):	0.16	1.65	1.47	5.87	13.2	23.5	
<b>MONITORING MEASUREMENTS</b>		<b>PURGING CALCULATIONS</b>									
Depth to Free Product (feet): X		Borehole Volumes (BV):									
Depth to Water (DTW)(feet): 7.50		WC <input type="checkbox"/> x BM <input type="checkbox"/> = (BV)(gal) x 1.5 BV (gal):									
Total Well Depth (feet): 40.00		Casing Volumes (CV):									
Water Column (WC)(feet): 32.5		WC <input type="checkbox"/> x CM <input type="checkbox"/> = CV (gal) x 3.0 CV (gal): 63									
Free Product Thickness (feet): X		Free Product Purged (gallons):									
<b>PURGING DATA</b>											
Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity ( $\mu$ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)			
1130	Purging Start Time										
50		20	16.5	6.70	816		X	No	No		
1210		40	16.9	6.54	829						
20		50	16.9	6.55	836		X	.			
30		60	16.9	6.49	829						
		53	Total Gallons Purged								
1230	Purging End Time										
<b>SAMPLING DATA</b>											
Time Sampled: 1550		Depth to Water @ Sample Time (DTW <sub>s</sub> ): 780									
Container Types, Volumes, & Quantities				Filtered (yes/no)	Sample Preservatives		Analytical Parameters (cross-out all NOT applicable)				
4 Voas				No	HCl						
<b>WELL RECOVERY DATA</b>											
Maximum Drawdown (DTW <sub>m</sub> ) (feet):				Approximate Flow Rate (GPM):							
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100				Recovery Calculation: % Recovery = 1 $\frac{(-)}{(-)} \times 100$							
Recovery Type: <input type="checkbox"/> Fast <input type="checkbox"/> Slow				% Recovery =							
<b>FIELD PERSONNEL</b>											
ATC Representative(s): Mike Sperber											
Subcontractor:											

Signature:

Date: 2/18/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: DM-5

Project Name: Customer Company - Cotati #50		Project No.: 54.25847.0050								
Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California										
<b>PURGING &amp; SAMPLING INSTRUMENTATION &amp; METHOD</b>										
Water Level Meter (Model/ID): EI		Interface Probe (Model/ID):								
Water Quality Meter (Model/ID): YSI 63		Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)								
Purging Method: PVC Bailer		Vacuum Truck	Submersible Pump <input checked="" type="checkbox"/> Other: Honda Pump							
Sampling Method: Teflon Bailer <input checked="" type="checkbox"/>		Disposable Bailer <input type="checkbox"/>	Other: _____							
<b>BOREHOLE &amp; WELL CASING VOLUME INFORMATION</b>										
Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4" <input checked="" type="checkbox"/>	6"	12"	18"	24"
Borehole Multiplier (BM)(gallons/foot):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/foot):	0.16	0.65 <input checked="" type="checkbox"/>	1.47	5.87	13.2	23.5
<b>MONITORING MEASUREMENTS</b>		<b>PURGING CALCULATIONS</b>								
Depth to Free Product (feet): X		Borehole Volumes (BV):								
Depth to Water (DTW)(feet): 7.39		WC _____ x BM _____ = _____ (BV)(gal) x 1.5 BV (gal):								
Total Well Depth (feet): 44.85		Casing Volumes (CV):								
Water Column (WC)(feet): 37.4		WC 37.4 x CM 0.65 = 24.3 (CV)(gal) x 3.0 CV (gal): 73								
Free Product Thickness (feet): X		Free Product Purged (gallons):								
<b>PURGING DATA</b>										
Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity ( $\mu$ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)		
1240	Purging Start Time									
1300		20	18.1	6.73	695		X	60	Ne	
20		40	18.8	6.61	707			1		
40		60	18.9	6.66	715					
50		70	19.1	6.63	721					
		73	Total Gallons Purged							
1353	Purging End Time									
<b>SAMPLING DATA</b>										
Time Sampled: 1600		Depth to Water @ Sample Time (DTWs): 7.39								
Container Types, Volumes, & Quantities		Filtered (yes/no)	Sample Preservatives		Analytical Parameters (cross-out all NOT applicable)					
4 Voas		No	HC1							
<b>WELL RECOVERY DATA</b>										
Maximum Drawdown (DTW <sub>m</sub> ) (feet):		Approximate Flow Rate (GPM):								
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100		Recovery Calculation: % Recovery = 1 - $\frac{(\text{_____} - \text{_____})}{(\text{_____} - \text{_____})}$ x 100								
Recovery Type: Fast Slow		% Recovery = _____								
<b>FIELD PERSONNEL</b>										
ATC Representative(s): Mike Sperber										
Subcontractor:										

Signature:

Date: 2/18/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: DM-6

Project Name: Customer Company - Cotati #50	Project No.: 54.25847.0050
Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California	

## PURGING & SAMPLING INSTRUMENTATION & METHOD

Water Level Meter (Model/ID): EI	Interface Probe (Model/ID):
Water Quality Meter (Model/ID): YSI 63	Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)
Purging Method: PVC Bailer	Vacuum Truck
Sampling Method: Teflon Bailer	X Disposable Bailer

## BOREHOLE & WELL CASING VOLUME INFORMATION

Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4"	6"	12"	18"	24"
Borehole Multiplier (BM)(gallons/foot):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/foot):	0.16	1.65	1.47	5.87	13.2	23.5

## MONITORING MEASUREMENTS

## PURGING CALCULATIONS

Depth to Free Product (feet): X	Borehole Volumes (BV):	
Depth to Water (DTW)(feet): 6.36	WC _____ x BM _____ = (BV)(gal) x 1.5 BV (gal):	
Total Well Depth (feet): 44.77	Casing Volumes (CV):	
Water Column (WC)(feet): 38.41	WC 38.41 x CM 0.65 = 24.9 (CV)(gal) x 3.0 CV (gal): 74	
Free Product Thickness (feet): X	Free Product Purged (gallons):	

## PURGING DATA

Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity (μ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)
900	Purging Start Time							
20		20	16.7	6.71	843		X	N
30		30	18.3	6.88	867			
50		50	18.7	6.88	879			
1010		70	18.8	6.81	871			
		74	Total Gallons Purged					
1014	Purging End Time							

## SAMPLING DATA

Time Sampled: 1530	Depth to Water @ Sample Time (DTW <sub>s</sub> ): 6.36	
Container Types, Volumes, & Quantities	Filtered (yes/no)	Sample Preservatives
4 Voas	No	HCl

## WELL RECOVERY DATA

Maximum Drawdown (DTW <sub>m</sub> )(feet):	Approximate Flow Rate (GPM):
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100	Recovery Calculation: % Recovery = 1 $\frac{(\quad - \quad)}{(\quad - \quad)}$ x 100
Recovery Type: Fast Slow	% Recovery = _____

## FIELD PERSONNEL

ATC Representative(s): Mike Sperber
Subcontractor:

Signature: \_\_\_\_\_

Date: 2/18/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: DM-7

Project Name: Customer Company - Cotati #50

Project No.: 54.25847.0050

Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California

## PURGING & SAMPLING INSTRUMENTATION & METHOD

Water Level Meter (Model/ID): EI	Interface Probe (Model/ID):			
Water Quality Meter (Model/ID): YSI 63	Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)			
Purging Method: PVC Bailer	Vacuum Truck	Submersible Pump	X	Other: Honda Pump
Sampling Method: Teflon Bailer	X	Disposable Bailer	Other:	

## BOREHOLE & WELL CASING VOLUME INFORMATION

Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4"	6"	12"	18"	24"
Borehole Multiplier (BM)(gallons/root):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/root):	0.16	4.65	1.47	5.87	13.2	23.5

## MONITORING MEASUREMENTS

## PURGING CALCULATIONS

Depth to Free Product (feet): X	Borehole Volumes (BV):	
Depth to Water (DTW)(feet): 6.76	WC _____ x BM _____ = _____ (BV)(gal) x 1.5 BV (gal): _____	
Total Well Depth (feet): 39.66	Casing Volumes (CV):	
Water Column (WC)(feet): 32.9	WC 32.9 x CM 0.65 = 21.3 (CV)(gal) x 3.0 CV (gal): 64	
Free Product Thickness (feet): X	Free Product Purged (gallons):	

## PURGING DATA

Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity (μ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)
1020	Purging Start Time							
40		20	18.0	7.05	392.2		VO	NP
1100		40	17.8	7.04	418.4			
10		50	18.4	6.88	436.6	X		
20		60	18.2	6.98	459			
		64	Total Gallons Purged					
24	Purging End Time							

## SAMPLING DATA

Time Sampled: 1540	Depth to Water @ Sample Time (DTWs): 6.74	
Container Types, Volumes, & Quantities 4 VOAs	Filtered (yes/no) No	Sample Preservatives HCl

## WELL RECOVERY DATA

Maximum Drawdown (DTWm) (feet):	Approximate Flow Rate (GPM):
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100	Recovery Calculation: % Recovery = 1 - $\frac{(\quad - \quad)}{(\quad - \quad)}$ x 100
Recovery Type: Fast Slow	% Recovery = _____

## FIELD PERSONNEL

ATC Representative(s): Mike Sperber

Subcontractor:

Signature:

Date: 2/18/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: **DM-8**

Project Name: Customer Company - Cotati #50		Project No.: 54.25847.0050									
Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California											
<b>PURGING &amp; SAMPLING INSTRUMENTATION &amp; METHOD</b>											
Water Level Meter (Model/ID): EI		Interface Probe (Model/ID):									
Water Quality Meter (Model/ID):		Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)									
Purging Method:	PVC Bailer	Vacuum Truck	Submersible Pump								
Sampling Method:	Teflon Bailer	Disposable Bailer	Other:								
<b>BORHOLE &amp; WELL CASING VOLUME INFORMATION</b>											
Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4"	6"	12"	18"	24"	
Borehole Multiplier (BM)(gallons/root):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/root):	0.16	1.65	1.47	5.87	13.2	23.5	
<b>MONITORING MEASUREMENTS</b>				<b>PURGING CALCULATIONS</b>							
Depth to Free Product (feet): X				Borehole Volumes (BV):							
Depth to Water (DTW)(feet):				WC	x BM	=	(BV)(gal)	x 1.5	BV (gal):		
Total Well Depth (feet):				Casing Volumes (CV):							
Water Column (WC)(feet):				WC	x CM	0.65	=	(CV)(gal)	x 3.0	CV (gal):	
Free Product Thickness (feet): X				Free Product Purged (gallons):							
<b>PURGING DATA</b>											
Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity (μ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)			
<i>Purging Start Time</i>											
Dry Well											
		0	Total Gallons Purged								
<i>Purging End Time</i>											
<b>SAMPLING DATA</b>											
Time Sampled:		Depth to Water @ Sample Time (DTWs):									
Container Types, Volumes, & Quantities		Filtered (yes/no)	Sample Preservatives		Analytical Parameters (cross-out all NOT applicable)						
None											
<b>WELL RECOVERY DATA</b>											
Maximum Drawdown (DTW <sub>m</sub> ) (feet):		Approximate Flow Rate (GPM):									
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100		Recovery Calculation:	% Recovery = 1 $\frac{(\quad - \quad)}{(\quad - \quad)}$ x 100								
Recovery Type: <input type="checkbox"/> Fast <input type="checkbox"/> Slow		% Recovery = _____									
<b>CONTACT PERSONNEL</b>											
ATC Representative(s): Mike Sperber											
Subcontractor:											

Signature: \_\_\_\_\_

Date: 2/18/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: DW-2

Project Name: Customer Company - Cotati #50	Project No.: 54.25847.0050
---------------------------------------------	----------------------------

Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California

## **PURGING & SAMPLING INSTRUMENTATION & METHOD**

Water Level Meter (Model/ID):	Interface Probe (Model/ID):		
Water Quality Meter (Model/ID):	Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)		

Purging Method: PVC Bailer      Vacuum Truck      Submersible Pump      Other:

Sampling Method: Teflon Bailer      X      Disposable Bailer      Other:

## **BOREHOLE & WELL CASING VOLUME INFORMATION**

Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4"	6"	12"	18"	24"
Borehole Multiplier (BM)(gallons/root):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/root):	0.16	0.65	1.47	5.87	13.2	23.5

## **MONITORING & SURVEY MILESTONES**

## **PURGING CALCULATIONS**

Depth to Free Product (feet): X	Borehole Volumes (BV):		
Depth to Water (DTW)(feet): 1029	WC _____ x BM _____ = (BV)(gal) x 1.5 BV (gal):		
Total Well Depth (feet):	Casing Volumes (CV):		
Water Column (WC)(feet):	WC _____ x CM _____ = (CV)(gal) x 3.0 CV (gal):		
Free Product Thickness (feet): X	Free Product Purged (gallons):		

## **PURGING DATA**

Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity (μ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)
<i>Purging Start Time</i>								
		<i>Total Gallons Purged</i>						

*Purging End Time*

## **SAMPLING DATA**

Time Sampled: 10/15	Depth to Water @ Sample Time (DTW <sub>s</sub> ):		
Container Types, Volumes, & Quantities	Filtered (yes/no)	Sample Preservatives	Analytical Parameters (cross-out all NOT applicable)
4 Voas	No	HC1	

## **WELL RECOVERY DATA**

Maximum Drawdown (DTW <sub>m</sub> )(feet):	Approximate Flow Rate (GPM):		
% Recovery = 1 - $\frac{(DTW - DTW_s)}{(DTW - DTW_m)}$ x 100	Recovery Calculation: % Recovery = 1 $\frac{(\quad - \quad)}{(\quad - \quad)}$ x 100		
Recovery Type: Fast Slow	% Recovery = _____		

## **FIELD PERSONNEL**

ATC Representative(s): Mike Sperber
Subcontractor:

Signature: \_\_\_\_\_

Date: 2/18/2005



# MONITORING WELL PURGING AND SAMPLING LOG

Well No.: **RP-Muni**

Project Name: Customer Company - Cotati #50		Project No.: 54.25847.0050								
Project Address / City / County: 766 E. Cotati Ave., Cotati, Sonoma County, California										
<b>PURGING &amp; SAMPLING INSTRUMENTATION &amp; METHOD</b>										
Water Level Meter (Model/ID):		Interface Probe (Model/ID):								
Water Quality Meter (Model/ID):		Decontamination Method: 3-stage bucket (wash, tap rinse, DI rinse)								
Purging Method:	PVC Bailer	Vacuum Truck	Submersible Pump							
Sampling Method:	Teflon Bailer	Disposable Bailer	Other:							
<b>BOREHOLE &amp; WELL CASING VOLUME INFORMATION</b>										
Borehole Diameter (Circle):	8"	10"	12"	Casing Diameter (Circle):	2"	4"	6"	12"	18"	24"
Borehole Multiplier (BM)(gallons/root):	0.81	1.5	1.95	Casing Multiplier (CM)(gallons/root):	0.16	0.65	1.47	5.87	13.2	23.5
<b>MONITORING MEASUREMENTS</b>				<b>PURGING CALCULATIONS</b>						
Depth to Free Product (feet):			Borehole Volumes (BV):							
Depth to Water (DTW)(feet):			WC	x BM	=	(BV)(gal) x 1.5 BV (gal):				
Total Well Depth (feet):			Casing Volumes (CV):							
Water Column (WC)(feet):			WC	x CM	=	(CV)(gal) x 3.0 CV (gal):				
Free Product Thickness (feet):			Free Product Purged (gallons):							
<b>PURGING DATA</b>										
Time	DTW (ft)	Cum. Vol. Purged (gallons)	Temp (°C)	pH	Electric Conductivity ( $\mu$ or m mhos)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Odor (Yes/No)		
<i>Purging Start Time</i>										
<i>Total Gallons Purged</i>										
<i>Purging End Time</i>										
<b>SAMPLING DATA</b>										
Time Sampled:			Depth to Water @ Sample Time (DTW <sub>s</sub> ):							
Container Types, Volumes, & Quantities			Filtered (yes/no)	Sample Preservatives		Analytical Parameters (cross-out all NOT applicable)				
4 Voas			No	HC1						
<b>WELL RECOVERY DATA</b>										
Maximum Drawdown (DTW <sub>m</sub> ) (feet):			Approximate Flow Rate (GPM):							
$\% \text{ Recovery} = 1 - \frac{(\text{DTW}_s - \text{DTW}_f)}{(\text{DTW}_s - \text{DTW}_m)} \times 100$			Recovery Calculation:	$\% \text{ Recovery} = 1 - \frac{(\text{DTW}_s - \text{DTW}_f)}{(\text{DTW}_s - \text{DTW}_m)} \times 100$						
Recovery Type: <input type="checkbox"/> Fast <input type="checkbox"/> Slow			% Recovery = _____							
<b>COPIED PERSONNEL</b>										
ATC Representative(s): Michael Sperber										
Subcontractor:										

Signature: \_\_\_\_\_

Date: 2/18/2005 



**Excelchem**500 Giuseppe Court, Suite 3  
Roseville, CA 95678**Environmental Labs**

Ph: 916-773-3664 Fax: 916-773-4784

**CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST**

Project Manager:

Keanne Hornsby

Phone #: 209-579-2221

Fax #:

Global 110 F  
To 6061700126

Company/Address:

ATC Associates Inc  
111 Long Lane  
Modesto, CA 95351

Project Number/P.O.#:

5412584170050

Project Location:

766 Cottat Ave  
Cottat, CA**ANALYSIS REQUEST**

Page 1 of 2

Electronic Data Deliverables Request:

Email Address:

Bin#

Due Date

Request/Spec TAT: 12hr/24hr/48hr/72hr Wk

Chloride, Sulfate, Sulfide, pH, Conductance

Nitrate, Nitrite, Ammonia, Kjeldahl

Cd, Cr, Pb, Zn (CAM 5)

Lead

CAM 17 Metals

Semi-VOC Full List (8270C)

TPHg/BTEX/5 Oxygenates (8260B)

Lead Scavengers DCA/EDB (8260B)

5 Oxygenates (8260B)

MTEB (8020/8260B) circle method

Methanol (8015M) Ethanol (8260)

VOC Full List (8260B)

Pesticides (608/8081A)

TPH as Oil (8015m)

TPH as Diesel (8015m)

BTEX/TPH as Gasoline (602/8020/8015)

TPH as Oil &amp; Grease (SM-18th 5520B)/1664

PCBs (8082)

Total Oil &amp; Grease (SM-18th 5520B)/1664

VOC Full List (8015m)

Pesticides (608/8081A)

VOC Full List (8260B)

Methanol (8015M) Ethanol (8260)

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Lead Scavengers DCA/EDB (8260B)

Lead (8260)

Chloride, Sulfate, Sulfide, pH, Conductance

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Lead (8260)

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Cd, Cr, Pb, Zn (CAM 5)

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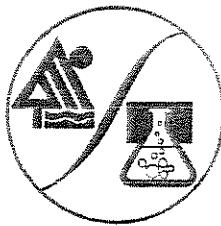
CAM 17 Metals

Semi-VOC Full List (8270C)

TPHg/BTEX/5 Oxygenates (8260B)

## **Attachment 2**

**EXCELCHEM**  
**ENVIRONMENTAL LABS**



500 Giuseppe Court, Suite 3  
Roseville, CA 95678

Phone#: (916) 773-3664 Fax#: (916) 773-4784

**ANALYSIS REPORT**

Attention: Jeanne Homsey  
ATC Associates, Inc.  
1117 Lone Palm Avenue  
Modesto, CA 95351

Project: Customer #50 / 54.25847.0050

Method: EPA 8260B

Date Sampled: 02/17,18/05  
Date Received: 02/21/05  
Date Analyzed: 02/23/05

Client Sample I.D.	MW-1		MW-2		MW-3		DM-1		DM-2		DM-3	
LAB. NO.	0502073-01	0502073-02	0502073-03	0502073-04	0502073-05	0502073-06	R/L	Results	R/L	Results	R/L	Results
ANALYTE	R/L	Results	R/L	Results	R/L	Results	R/L	Results	R/L	Results	R/L	Results
TPH as Gasoline	50	200	50	ND	50	ND	50	ND	50	ND	50	ND
Benzene	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
Toluene	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
Ethylbenzene	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
Total Xylenes	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND	1.0	ND
tert-Butanol	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND	5.0	ND
MTBE	0.5	9.8	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	5.3
Diisopropyl ether	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
Ethyl tert-butyl ether	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
tert-Amyl methyl ether	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
1,2-Dichloroethane	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
1,2-Dibromoethane	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
SURROGATE %RECOVERY												
Dibromofluoromethane	103		102		102		95		104		102	
Toluene-d8	100		99		96		99		98		104	
4-Bromofluorobenzene	106		100		101		103		105		98	

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

R/L = Reporting Limit

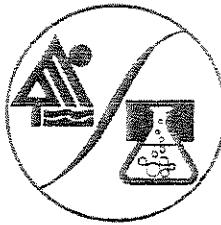
Water samples reported in µg/L

  
Laboratory Representative

02/24/05

Date Reported

**EXCELCHEM**  
**ENVIRONMENTAL LABS**



500 Giuseppe Court, Suite 3  
Roseville, CA 95678

Phone#: (916) 773-3664 Fax#: (916) 773-4784

**ANALYSIS REPORT**

Attention: Jeanne Homsey  
ATC Associates, Inc.  
1117 Lone Palm Avenue  
Modesto, CA 95351

Project: Customer #50 / 54.25847.0050  
Method: EPA 8260B

Date Sampled: 02/17,18/05  
Date Received: 02/21/05  
Date Analyzed: 02/23/05

Client Sample I.D.	DM-4		DM-5		DM-6		DM-7		DW-2	
LAB. NO.	0502073-07		0502073-08		0502073-09		0502073-10		0502073-11	
ANALYTE	R/L	Results								
TPH as Gasoline	50	ND								
Benzene	0.5	ND								
Toluene	0.5	ND								
Ethylbenzene	0.5	ND								
Total Xylenes	1.0	ND								
tert-Butanol	5.0	ND								
MTBE	0.5	ND	0.5	6.6	0.5	ND	0.5	ND	0.5	ND
Diisopropyl ether	0.5	ND								
Ethyl tert-butyl ether	0.5	ND								
tert-Amyl methyl ether	0.5	ND								
1,2-Dichloroethane	0.5	ND								
1,2-Dibromoethane	0.5	ND								
SURROGATE %RECOVERY										
Dibromofluoromethane	104		101		97		98		99	
Toluene-d8	97		98		87		101		97	
4-Bromofluorobenzene	94		99		100		106		101	

QA/QC %RECOVERY			
	LCS	MS	MSD
1,1-Dichloroethene	104	112	113
Benzene	98	108	100
Trichloroethene	99	114	107
Toluene	97	108	107
Chlorobenzene	101	113	110

QA/QC Analyzed: 02/22/05

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

R/L = Reporting Limit

Water samples reported in µg/L

  
Laboratory Representative

02/24/05

Date Reported





## **Attachment 3**

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

### UPLOADING A GEO\_WELL FILE

Processing is complete. No errors were found!  
Your file has been successfully submitted!

**Submittal Title:** Food & Liquor #50 (Cotati) - DTW for 1st Quarter  
2005

**Submittal Date/Time:** 4/18/2005 5:28:28 PM

**Confirmation Number:** 7218464493

[Back to Main Menu](#)

Logged in as ATCMGEN (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.

**Electronic Submittal Information**

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

Your EDF file has been successfully uploaded!

**Confirmation Number:** 5492114305  
**Date/Time of Submittal:** 4/18/2005 5:08:40 PM  
**Facility Global ID:** T0609700126  
**Facility Name:** Food & Liquor #50  
**Submittal Title:** Monitoring Report - 1st Quarter 2005  
**Submittal Type:** GW Monitoring Report

[Click here to view the detections report for this upload.](#)

<b>FOOD &amp; LIQUOR #50</b>		<b>Regional Board - Case #: 1TSO162</b> NORTH COAST RWQCB (REGION 1) - (HAZ) <b>Local Agency (lead agency) - Case #: 080001522</b> SONOMA COUNTY LOP - (DB)
<b>GONE#</b> 5492114305	<b>TITLE</b> Monitoring Report - 1st Quarter 2005	<b>QUARTER</b> Q1 2005
<b>SUBMITTED BY</b> Jim Kundert	<b>SUBMIT DATE</b> 4/18/2005	<b>STATUS</b> PENDING REVIEW
<b>SAMPLE DETECTIONS REPORT</b>		
# FIELD POINTS SAMPLED 11		
# FIELD POINTS WITH DETECTIONS 3		
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL 1		
SAMPLE MATRIX TYPES WATER		
<b>METHOD QA/QC REPORT</b>		
METHODS USED SW8260B		
TESTED FOR REQUIRED ANALYTICS? Y		
LAB NOTE DATA QUALIFIERS N		
<b>QA/QC FOR 8021/8260 SERIES SAMPLES</b>		

[https://esi.waterboards.ca.gov/ab2886/upload\\_edf\\_4.asp?temp\\_folder=473476ATCMGEN](https://esi.waterboards.ca.gov/ab2886/upload_edf_4.asp?temp_folder=473476ATCMGEN)

4/18/2005

TECHNICAL HOLDING TIME VIOLATIONS	0	
METHOD HOLDING TIME VIOLATIONS	0	
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0	
LAB BLANK DETECTIONS	0	
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?		
- LAB METHOD BLANK	N	
- MATRIX SPIKE	Y	
- MATRIX SPIKE DUPLICATE	Y	
- BLANK SPIKE	Y	
- SURROGATE SPIKE	Y	
<b>WATER SAMPLES FOR 8021/8260 SERIES</b>		
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y	
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y	
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	Y	
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y	
<b>SOIL SAMPLES FOR 8021/8260 SERIES</b>		
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	n/a	
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	n/a	
SURROGATE SPIKES % RECOVERY BETWEEN 70-125%	n/a	
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	n/a	
<b>FIELD QC SAMPLES</b>		
<b>SAMPLE</b>	<b>COLLECTED</b>	<b>DETECTIONS &gt; REPD</b>
QCTB SAMPLES	N	0
QCBB SAMPLES	N	0
QCAB SAMPLES	N	0

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